

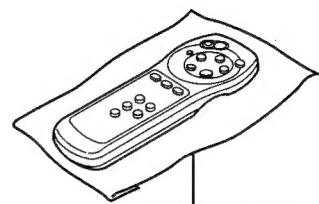
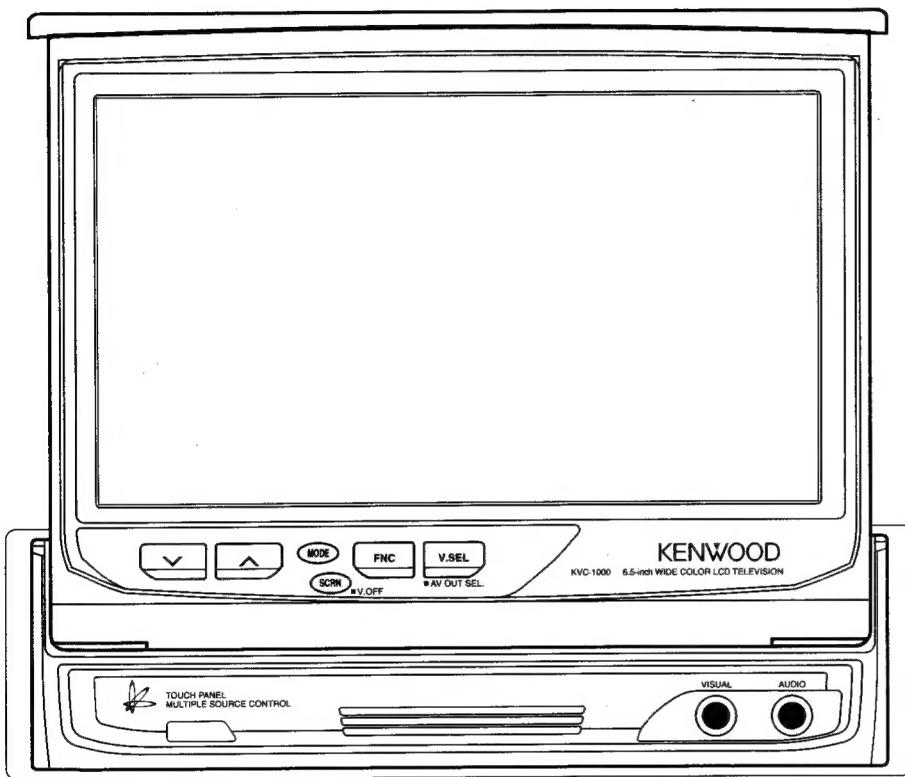
WIDE TV

# KVC-1000

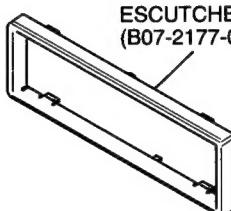
## SERVICE MANUAL

KENWOOD

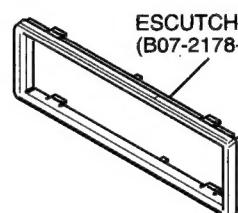
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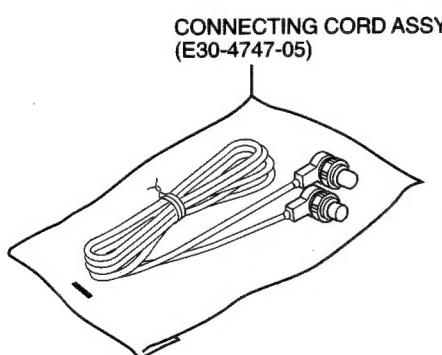
REMOTE CONTROLLER  
(A70-2002-05)



ESCUTCHEON (Thicker one)  
(B07-2177-02)



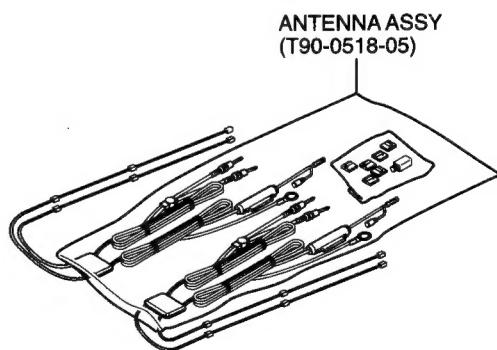
ESCUTCHEON (Thinner one)  
(B07-2178-02)



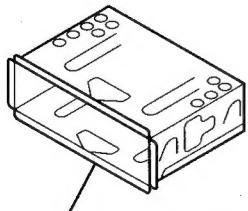
CONNECTING CORD ASSY  
(E30-4747-05)



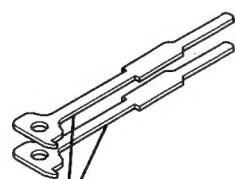
DC CORD ASSY  
(E30-4744-05)



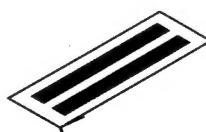
ANTENNA ASSY  
(T90-0518-05)



MOUNTING HARDWARE ASSY  
(J21-7881-03)



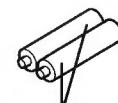
LEVER  
(D10-4395-04)x2



CUSHION  
(G11-1860-05)



REMOTE CONTROLLER  
(A70-0886-05)



BATTERY  
(Non-service part)

# KVC-1000

## COMPONENT DESCRIPTION

### VIDEO CONTROL UNIT (X14-6072-70)

REF. No.	NAME	FUNCTION
IC1	$\mu$ -COM	Microcomputer.
IC2	$\mu$ -COM RESET	Microcomputer reset. Detecting voltage : 3.0V.
IC3	BUS INTERFACE	MZ-BUS communication.
IC4	EEPROM	Memorizes value of the monitor mechanism sensor and the touch panel calibration.
IC5	REMOTE SENSOR	Receives TV and the navigation remote controller signals.
IC6	5V AVR	5V AVR.
IC101	AUDIO SW	Switches audio signal.
IC102	AUDIO SW	Switches audio signal.
IC103	ISOLATION AMPLIFIER	Isolates the navigation input audio signal.
IC104	ISOLATION AMPLIFIER	Isolates external input audio signal.
IC105	ISOLATION AMPLIFIER	Isolates external input audio signal.
IC106	AUDIO SW	Switches audio signal.
IC107	OPERATION AMPLIFIER	Buffer & amplifier of center voltage for audio power supply.
IC108	NOISE CANCELER	Cancels noise.
IC109	15KHz LPF	15KHz LPF.
IC110	MONORAL BTL AUDIO AMPLIFIER	Amplifies internal speaker signal.
IC201	TV DIVERSITY SW	Switches TV antenna.
IC202	VIDEO SW	Switches external input video signal.
IC203	VIDEO SW	Switches external output video signal.
IC204	AM DETECTOR	Detects SIF (AM).
IC205	TV VIF/MACRO	Detects VIF, and processes macro.
IC301	TV VIF/SIF	Detects VIF and SIF for the diversity signal.
IC302	RGB SW	Switches video signal for the diversity signal.
IC303	SYNC PULSE SEPARATOR	For the diversity signal.
IC304	NOR GATE	For the diversity signal.
IC501	DC/DC CONVERTER CONTROLLER	Controls DC/DC converter.
IC502	ON-SCREEN DISPLAY CONTROLLER	Controls on-screen display (OSD).
IC503	OSD BUFFER	OSD circuit buffer.
IC504	MOTOR DRIVER	Drives TV mechanism motor.
IC505	OSD/VIDEO SW	Switches on-screen signal and video signal.
IC507	HALF TONE	Switches video signal and semi-brightness signal.
IC508	MOTOR DRIVER	Drives TV mechanism motor.
Q1	ACC DETECTION	Detects ACC.
Q2	BACK-UP DETECTOR	Detects the back-up.
Q3	PARKING DETECTOR	Detects the parking signal.
Q4	MASTER/SLAVE DETECTOR	Detects the master and slave.
Q5	BACK-UP 5V AVR	Supplies 5V to the back-up circuit.
Q6	BACK-UP 5V AVR	Supplies 5V to microcomputer.
Q7	ILLUMINATION DETECTOR	Detects illumination signal.
Q8	BACK-UP SW	Switches the back-up power supply.
Q9	Q8 DRIVER	Drives Q8.
Q10	TV 8.5V AVR	Supplies power to TV front-end and intermediate frequency (IF) circuit.
Q11	BACK-UP 5V SW	Switched by the back-up comes to 5V.
Q12	VIDEO 5V AVR	Supplies power to video circuit.
Q13	SYSTEM 9V AVR	Supplies power to motor driver and key illumination circuit.

## COMPONENT DESCRIPTION

## VIDEO CONTROL UNIT (X14-6072-70)

REF. No.	NAME	FUNCTION
Q14	Q13 SW	Switches AVR of Q13.
Q15	Q14 DRIVER	Drives Q14.
Q16	AUDIO 8.5V AVR	Supplies power to audio circuit.
Q17	BUZZER DRIVER	Drives buzzer.
Q18	RESET SW	Controls panel circuit reset and the bus reset.
Q19	SYSTEM ON/OFF SW	Controls the bus system-on or off input.
Q20	SYSTEM ON/OFF SW	Controls the bus system-on or off output.
Q21	PANEL RESET DRIVER	"ON" during panel reset key goes on.
Q22	AUDIO MUTE DRIVER	Drives the bus audio mute.
Q23	AUDIO MUTE DRIVER	Drives the bus audio mute.
Q24	Q16 DRIVER	Drives Q16.
Q101	BACK-UP SERGE SW	Switches MZ-BUS GND.
Q102	AUDIO MUTE DRIVER	Drives AUX output audio mute.
Q103	AUDIO MUTE DRIVER	Drives AUX output audio mute.
Q104	AUDIO SW	Switches AUX output audio signal.
Q105	AUDIO MUTE	AUX output audio mute.
Q106	AUDIO MUTE	AUX output audio mute.
Q107	AUDIO SW	Switches AUX output audio signal.
Q108	AUDIO SW	Switches MZ-BUS output audio signal.
Q109	AUDIO SW	Switches MZ-BUS output audio signal.
Q110	BUS GND SW	Switches the bus GND line on or off.
Q111	Q101 DRIVER	Drives Q101 current.
Q112	AUDIO SW	Switches internal speaker audio signal.
Q113	AUDIO SW	Switches internal speaker audio signal.
Q114	SP-AMP 8.5V AVR	Supplies power to speaker amplifier.
Q115	SP-AMP 8.5V AVR	Supplies power to speaker amplifier.
Q116	AUDIO MUTE	Speaker amplifier's volume mute.
Q201	VIDEO BUFFER	Video signal buffer for the diversity signal.
Q202	DIVERSITY SW	Turns TV antenna diversity signal on or off.
Q203	H-SYNC PULSE GENERATOR	Generates H-synchronization pulse.
Q204	H-SYNC PULSE GENERATOR	Generates H-synchronization pulse.
Q205	VIDEO SW	Switches external input video signal.
Q206	VIDEO SW	Switches external input video signal.
Q208	SYNC MUTE	Synchronization mute.
Q209	RGB BUFFER	RGB signals buffer.
Q210	RGB BUFFER	RGB signals buffer.
Q211	RGB BUFFER	RGB signals buffer.
Q212	VIDEO BUFFER	Video signal buffer.
Q213	VIDEO BUFFER	Video signal buffer.
Q214	IF SW	Switches SAW filter input intermediate frequency.
Q215	IF SW	Switches SAW filter input intermediate frequency.
Q216	RGB MUTE	RGB signals mute.
Q217	RGB MUTE	RGB signals mute.
Q218	RGB MUTE	RGB signals mute.
Q219	SYNC BUFFER	Synchronized signal buffer.
Q220	VIF AMPLIFIER	Amplifies VIF.
Q301	CRYSTAL RESONATOR SW	Switches crystal resonator.

# KVC-1000

## COMPONENT DESCRIPTION

### VIDEO CONTROL UNIT (X14-6072-70)

REF. No.	NAME	FUNCTION
Q302	CRYSTAL RESONATOR SW	Switches crystal resonator.
Q303	CRYSTAL RESONATOR SW	Switches crystal resonator.
Q304	CRYSTAL RESONATOR SW	Switches crystal resonator.
Q305	SIF AMPLIFIER	Amplifies SIF.
Q306	VIDEO BUFFER	Video signal buffer.
Q501	IC501 POWER SW	Turns IC501 power supply on or off.
Q502	IC501 POWER SW	Turns IC501 power supply on or off.
Q503	IC501 POWER SW	Turns IC501 power supply on or off.
Q504	DC/DC SW	Drives fly-back circuit.
Q505	DC/DC SW	Drives chopper circuit.
Q506	Q505 DRIVER	Drives Q505.
Q507	Q505 DRIVER	Drives Q505.
Q508	SEMI-BRIGHTNESS CONTROLLER	Controls semi-brightness on OSD circuit.
Q509	GREEN DRIVER	Drives "G" of RGB signals on OSD circuit.
Q510	RED DRIVER	Drives "R" of RGB signals on OSD circuit.
Q511	BLUE DRIVER	Drives "B" of RGB signals on OSD circuit.
Q513	SLIDE MOTOR VOLTAGE SW	Switches slide motor voltage.
Q514	H-SYNC BUFFER	H-synchronization signal buffer.
Q515	RED DRIVER	Drives "R" of RGB signals on OSD circuit.
Q516	GREEN DRIVER	Drives "G" of RGB signals on OSD circuit.
Q517	BLUE DRIVER	Drives "B" of RGB signals on OSD circuit.

### VIDEO UNIT (X35-4132-71)

REF. No.	NAME	FUNCTION
IC30	V-COM DRIVER	Driver and buffer for V-COM AC.
IC31	GAMMA CORRECTOR	Corrects the gamma.
IC61	MONORAL MULTIPLEXER	Controls the black mask.
IC71	TIMING CONTROLLER	Controls LCD.
IC91	PLL CONTROLLER	Controls PLL.
Q11	CONTROL SW	Controlling switch for the touch panel circuit.
Q12	CONTROL SW	Controlling switch for the touch panel circuit.
Q13	CONTROL SW	Controlling switch for the touch panel circuit.
Q14	CONTROL SW	Controlling switch for the touch panel circuit.
Q15	CONTROL SW	Controlling switch for the touch panel circuit.
Q16	ILLUMINATION-ON SW	Turns illumination on.
Q20	INVERTER DRIVER	Drives inverter.
Q21	INVERTER DRIVER	Drives inverter.
Q22	INVERTER SW	Switches inverter.
Q23	DIMMER SW	Switches dimmer.
Q24	DIMMER SW	Switches dimmer.
Q60	7.5V AVR	Supplies 7.5V to the gamma corrector IC (IC31).
Q61	12V AVR	Ripple filter.
Q73	TV/NAVI SW	Switches TV and the navigation mode.
Q74	TV/NAVI SW	Switches TV and the navigation mode.
Q91	VCO	Oscillates PLL.

# KVC-1000

## CIRCUIT DESCRIPTION

(X14-) IC1 :  $\mu$ -COM

PORT No.	PORT NAME	I/O	FUNCTION	OPERATING CONDITION
1	EX M+	O	Mechanism slide motor output +.	
2	EX M-	O	Mechanism slide motor output -.	
3	RI M+	O	Mechanism tilt motor output +.	
4	RI M-	O	Mechanism tilt motor output -.	
5	EX SW	O	Mechanism slide motor voltage control.	
6	SP MUTE	O	Speaker mute.	
7	BUS G SW	O	BUS GND switch.	"H" : KVC-1000's source.
8	MEC PON	O	Mechanism power supply and LED on.	"H" : Power ON.
9	VDD	-	Power supply.	
10	X2	-	Main system clock input 2.	
11	X1	-	Main system clock input 1.	
12	VSS	-	GND.	
13	XT2	-	Sub system clock input 2.	
14	XT1	-	Sub system clock input 1.	
15	<u>RESET</u>	I	Reset input.	"L" : Reset.
16	<u>POWER KEY</u>	I	"OPEN" key input.	"L" : ON/OFF.
17	BIRQ	I	BUS communication request interrupt.	
18	PWM	I	Brightness control synchronization signal input.	
19	SYNC MUTE	O	Synchronization signal mute.	
20	VO1	O	Video switch 1.	
21	VO2	O	Video switch 2.	
22	REF CON	O	A/D converter reference voltage output.	
23	A VDD	-	A/D converter analogue power supply.	
24	AV REF 0	I	A/D converter reference voltage input.	
25	E SENS	I	Mechanism slide position input.	
26	R SENS	I	Mechanism tilt position input.	
27	TP XDT	I	Touch panel X coordinate data input.	
28	TP YDT	I	Touch panel Y coordinate data input.	
29	AGC	I	AGC value input.	
30	TYPE	I	Destination input.	
31	<u>MEC SW</u>	O	Mechanism connection detection.	"L" : Mechanism connected.
32	OSD TRE	I	OSD communication permission input.	
33	A VSS	-	Connected to A/D converter and D/A converter GND.	
34	BLACK	O	Black level adjustment.	
35	CONTRAST	O	Contrast adjustment.	
36	AV REF 1	-	D/A converter reference voltage.	
37	OSD CS	O	OSD communication chip selector.	"H" : Selected.
38	OSD DO	O	OSD communication data output.	
39	OSD CK	O	OSD communication clock.	
40	NAVI D I	I	Navigation communication data input.	
41	NAVI D O	O	Navigation communication data output.	
42	NAVI CK I	I	Navigation communication clock input.	
43	NAVI CK O	O	Navigation communication clock output.	
44	<u>OSD RST</u>	O	OSD communication reset.	Reset when "L" continues 1mS or the more.
45	BDT I	I	BUS communication data input.	
46	BDT O	O	BUS communication data output.	
47	B CLK	O	BUS communication clock.	
48	B RST	O	BUS communication reset.	
49	B CS	O	BUS communication chip selector.	
50	B C/D	O	BUS communication code/decode switch.	

# KVC-1000

## CIRCUIT DESCRIPTION

(X14-) IC1 :  $\mu$ -COM

PORT No.	PORT NAME	I/O	FUNCTION	OPERATING CONDITION
51	KS2	O	Key scan 2.	
52	KS1	O	Key scan 1.	
53	KR3	I	Key return 3.	"H" : Key ON.
54	KR2	I	Key return 2.	"H" : Key ON.
55	KR1	I	Key return 1.	"H" : Key ON.
56	TR X1	O	Touch panel X coordinate designation 1.	
57	TP X0	O	Touch panel X coordinate designation 0.	
58	TP Y0	O	Touch panel Y coordinate designation 0.	
59	TEST1	O	TV PLL test mode.	"L" during only single TV antenna is used.
60	LED ON	O	LED on during mechanism operates.	"H" : LED ON.
61	TV L	O	TV L form.	"H" : France ch2,3,4.
62	JACK	I	Front AV connection detection.	"L" : Connection exists.
63	TV DK	O	TV DK form.	
64	TV I	O	TV I form.	
65	NTSC	O	NTSC/PAL switch.	"H" : NTSC.
66	MDS	O	Wide mode switch.	
67	MDW	O	Wide mode switch.	
68	MDN	O	Wide mode switch.	
69	RGB SW	O	RGB video switch.	"H" : TV/VIDEO.
70	AB1	O	Audio switch 1.	
71	AB2	O	Audio switch 2.	
72	VSS	-	GND.	
73	BU DET	I	BACK-UP input.	"L" : BACK-UP OFF.
74	ACC DET	I	ACC input.	"L" : ACC OFF.
75	ON REQ	I	System-on input.	"L" : ON-request.
76	OFF REQ	I	P. ON request input.	"L" : OFF-request.
77	SLV SW	I	TV solo operation switch.	"H" : Solo operation.
78	AV IN/OUT	I	Rear AV input/output switch.	"H" : AV IN.
79	VI1	O	Video input switch.	"H" : Front.
80	ILLUMI	I	Illumination switch.	"L" : Illumination ON.
81	VDD	-	Power supply.	
82	PARK SW	I	The parking switch.	"H" : ON.
83	BEEP	O	Beep output.	
84	SP VOL	O	Speaker output.	
85	HSY	I	Brightness control counter input.	
86	AO1	O	Audio output 1.	
87	AO2	O	Audio output 2.	
88	AS1	O	Speaker output 1.	
89	AS2	O	Speaker output 2.	
90	BRIGHT	O	Brightness output.	
91	REMO	I	Remote control input.	
92	BUS MUTE	O	Bus mute output.	"H" : Mute.
93	AO MUTE	O	TV audio mute output.	"H" : Mute.
94	TEST	-	Connected to VSS.	
95	SYS ON	O	System-on output.	"L" : System ON.
96	SYS OFF	O	System-off output.	"L" : System OFF.
97	PON	O	Power-on output.	"L" : BACK-UP 5V SW ON.
98	SCL	O	12C clock output.	
99	SDA	I/O	12C data input and output.	
100	AM/FM	O	AM/FM switch	"L" : AM.

## TEST MODE

### (1) Setting method

- While holding the 'VOL UP' and 'VSEL' keys depressed, reset the unit.

### (2) Common contents

- The TV source is selected.
- The seek mode is set to auto mode.
- The screen mode is set to full-size.
- Pressing the ADJ key in the MENU screen writes the maximum and minimum stop positions of the mechanism tilting/sliding in the EEPROM.
- Adjusting TOUCH in the SET UP screen writes the reference points (2 points) of the touch panel in the EEPROM.
- When writing in the EEPROM is finished normally, the beep tone is generated twice.
- An error occurrence causes the beep tone to be generated 4 times.
- When a screen other than the picture window is touched, a cross-cursor is displayed.
- The transmitter can be switched ON/OFF using the MODE key on the remote control unit (the transmitter is usually OFF).
- The diversity can be switched ON/OFF using the VSEL key on the remote control unit (it is usually ON).
- Pressing the SP\_MODE key on the remote control unit calls the touch panel adjustment screen.
- Clicking ANGLE, SLIDE, BRT, TIN, COL, CONT or BLK once switches the function between Full-down <=> Center <=> Full-up.
- Short press of a key causes the beep tone to be generated.
- Display after power ON:  
German CH9.

### (3) Initial preset channel value

TV Format	Country	Initial Preset CH						
		Preset No.	①	②	③	④	⑤	⑥
PAL-B/G	Germany	CH No.	3	9	43	69	2	2

TV Format	Country	Initial Preset CH						
		Preset No.	①	②	③	④	⑤	⑥
PAL-I	UK	CH No.	21	21	43	69	A	A

TV Format	Country	Initial Preset CH						
		Preset No.	①	②	③	④	⑤	⑥
SECAM-L	France	CH No.	3	8	48	69	2	2

TV Format	Country	Initial Preset CH						
		Preset No.	①	②	③	④	⑤	⑥
SECAM-D/K	Hungary	CH No.	2	10	43	69	1	1

TV Format	Country	Initial Preset CH						
		Preset No.	①	②	③	④	⑤	⑥
SECAM-B/G	Greece	CH No.	3	9	43	69	2	2

### (4) Writes the immobilizer mode in the EEPROM.

- Clears the immobilizer code.
- Pressing the FNC key on the remote control unit calls the TV Area setup screen.

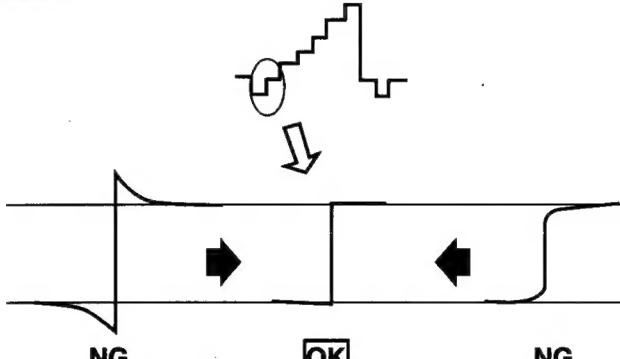
## Canceling the Test Mode

Any of the reset, momentary power down, ACC OFF and POWER OFF operations causes the test mode to be canceled and resets all settings to the initial default values.

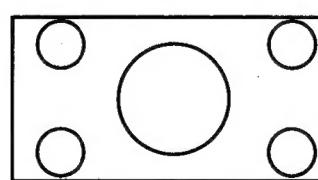
# KVC-1000

## ADJUSTMENT

(X14-)

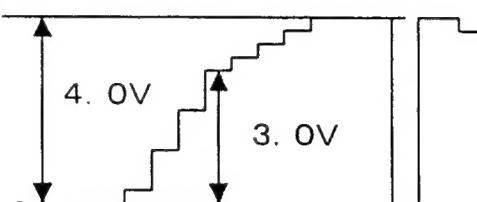
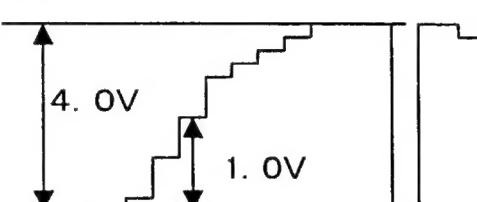
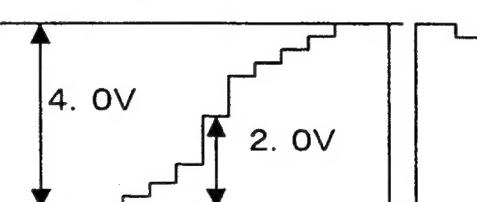
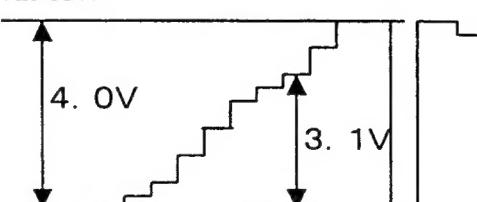
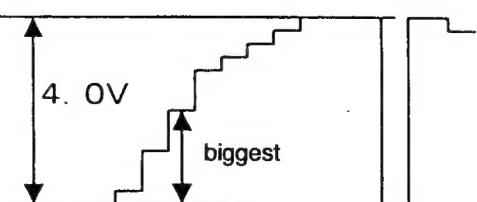
Item	Adjustment Procedure/Value	Condition
1. Diversity free-run frequency adjustment VR201  DIVERSITY FREE RUN FREQUENCY	1. Connect a frequency counter to TP [IC201 #7]. 2. Apply 5V at TP [IC201 #8]. 3. Apply 2.5V (low impedance) at TP [IC201 #2]. 4. Adjust VR201 [15kHz] to read $15625\text{Hz}\pm100\text{Hz}$ .	• No ANT input signal
2. Audio detection coil adjustment L301  AUDIO DETECTION	1. Input the 70dBu RF signal of the color bar signal of CH9 to the ANT input terminal. 2. Connect a voltmeter to TP [SIF] (across R304) and adjust L301 to read $0\text{V}\pm0.01\text{V}$ .	• PAL B/G • P/S ratio 10dB
3. Diversity video detection coil adjustment L303  DIVERSITY VIDEO DETECTION	1. Input the 70dBu RF signal of the stair-step signal of CH9 to the ANT input terminal. 2. Observe the waveform at TP [VIDEO] (R327 at the emitter of Q306) and adjust L303 so that the sync tip and pedestal edge become horizontal as shown below.  	• PAL B/G • Color OFF

(X35-)

Item	Adjustment Procedure/Value	Condition
1. Free-run frequency adjustment VR110 [15.734kHz]	With no video input, adjust VR110 so that the HYS frequency is $15.734\text{kHz}\pm0.01\text{kHz}$ .	• No input video
2. Screen display start position adjustment VR70 [2.1μSec]	• Adjust VR70 so that the phase difference between the negative going of HSY and positive going of SYNC is 2.1usec. Instead of the above, it is also acceptable to adjust the monoscope screen so that its left and right sections are even.  	• Monoscope
3. Input signal	Apply a composite sync signal (10-step signal) to the SYNC input.  	• To the VIDEO input of Mother (X14).

## ADJUSTMENT

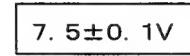
(X35-)

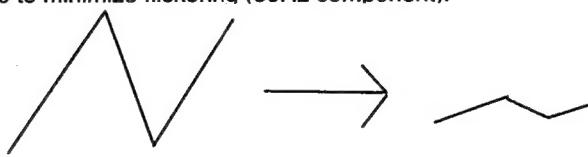
Item	Adjustment Procedure/Value	Condition
4. Gamma curve adjustment ①VR36 <b>RGB AMP</b> ②VR32-34 <b>GAMMA</b> ③VR35 <b>BLACK ADJ</b>	1. Adjust RGB AMP VR36 so that the voltage between SYNC signals is $4.0V \pm 0.1V$ p-p. 2. Adjust VR32, VR33 and VR34 so that the GAMMA 0, GAMMA 2 and CONTRAST voltages are $3.5V \pm 0.05V$ . 3. Adjust BLACK ADJ VR35 so that the voltage at the 4th step from the pedestal is $3.0V \pm 0.05V$ .	<ul style="list-style-type: none"> <li>• Input signal: Composite input (10-step signal)</li> <li>• AC range</li> <li>• Oscilloscope: 1V/DIV. or 0.5V/DIV.</li> </ul> 
4. Gamma curve adjustment ④VR32 <b>GAMMA</b>	4. Adjust GAMMA 0 VR32 so that the voltage at the 3rd step from the pedestal is $1.0V \pm 0.05V$ .	<ul style="list-style-type: none"> <li>• Input signal: Composite input (10-step signal)</li> <li>• AC range</li> <li>• Oscilloscope: 1V/DIV.</li> </ul> 
4. Gamma curve adjustment ⑤VR35 <b>BLACK ADJ</b>	5. Adjust BLACK ADJ VR35 so that the voltage at the 4th step from the pedestal is $2.0V \pm 0.05V$ . (Note) There are 2 points where the voltage can be adjusted to 2V, but always rotate the potentiometer clockwise in this adjustment. If the potentiometer is rotated counterclockwise, the adjustment in 6 below will not be achievable.	<ul style="list-style-type: none"> <li>• Input signal: Composite input (10-step signal)</li> <li>• AC range</li> <li>• Oscilloscope: 1V/DIV.</li> </ul> 
4. Gamma curve adjustment ⑥VR33 <b>GAMMA</b>	6. Adjust GAMMA 2 VR33 so that the voltage at the 7th step from the pedestal is $3.1V \pm 0.05V$ .	<ul style="list-style-type: none"> <li>• Input signal: Composite input (10-step signal)</li> <li>• AC range</li> <li>• Oscilloscope: 1V/DIV.</li> </ul> 
4. Gamma curve adjustment ⑦VR35 <b>BLACK ADJ</b>	7. Adjust BLACK ADJ VR35 to maximize the voltage at the 3rd step from the pedestal.	<ul style="list-style-type: none"> <li>• Input signal: Composite input (10-step signal)</li> <li>• AC range</li> <li>• Oscilloscope: 1V/DIV.</li> </ul> 

# KVC-1000

## ADJUSTMENT

(X35-)

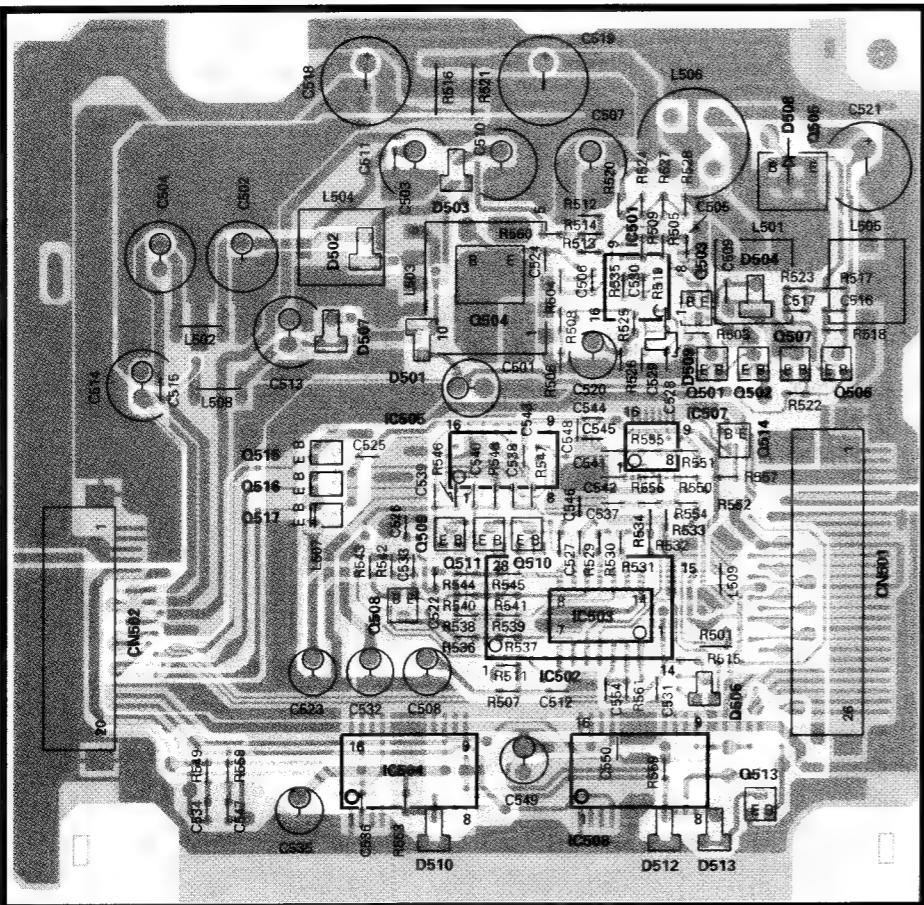
Item	Adjustment Procedure/Value	Condition
4. Gamma curve adjustment ⑧VR34 CONTRAST ADJ	8. Adjust CONTRAST ADJ VR34 so that the voltage at the 11th step from the pedestal is $3.8V \pm 0.05V$ .	<ul style="list-style-type: none"> <li>• Input signal: Composite input (10-step signal)</li> <li>• AC range</li> <li>• Oscilloscope: 1V/DIV.</li> </ul>
5. VCOM amplitude adjustment VR31 COM-AC	Adjust COM-AC VR31 so that the VCOM amplitude becomes as shown below. 	<ul style="list-style-type: none"> <li>• Input signal: Composite input (10-step signal)</li> <li>• AC range</li> <li>• Oscilloscope: 1V/DIV.</li> </ul>
6. VCOM center adjustment VR30 COM-DC	Adjust COM-DC VR30 so that the VCOM waveform becomes as shown below. 	<ul style="list-style-type: none"> <li>• Input signal: Composite input (10-step signal)</li> <li>• DC range</li> </ul>

Item	Adjustment Procedure/Value	Condition
1. Screen display start position check VR70 MONO SCOPE	Check the monoscope screen to see if the left and right sections are even. If they are deviated slightly, adjust VR70 to make them even. If they are deviated considerably, restart adjustments from that of X35.	<ul style="list-style-type: none"> <li>• Monoscope</li> </ul>
2. Flicker adjustment VR30 FLICKER	Adjust VR30 to minimize flickering (60Hz component). 	<ul style="list-style-type: none"> <li>• Input signal: Composite input, gray RASTA (white 30% to 50%)</li> <li>• AC range</li> <li>• Flicker adjustment tool</li> </ul>

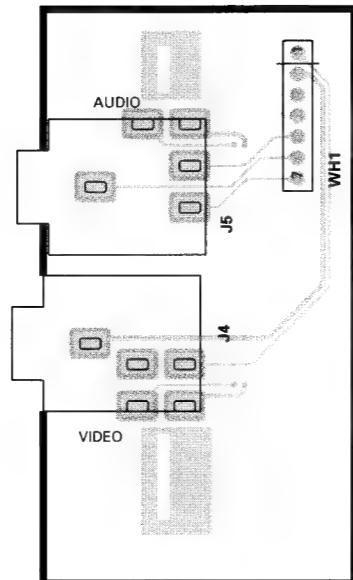
## PC BOARD(Component side view)

1 2 3 4 5 6 7

14 B/3

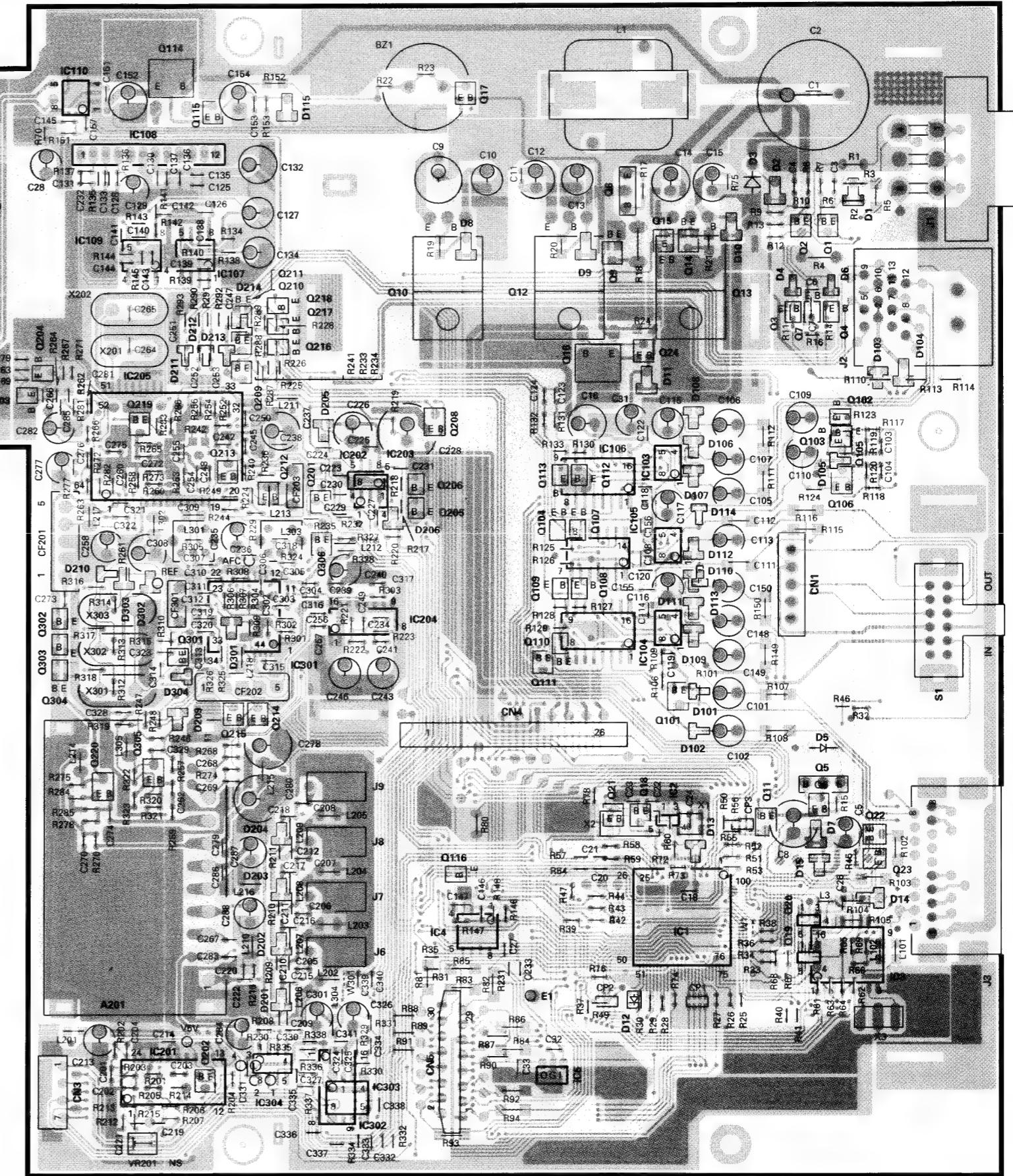


X14 C/3



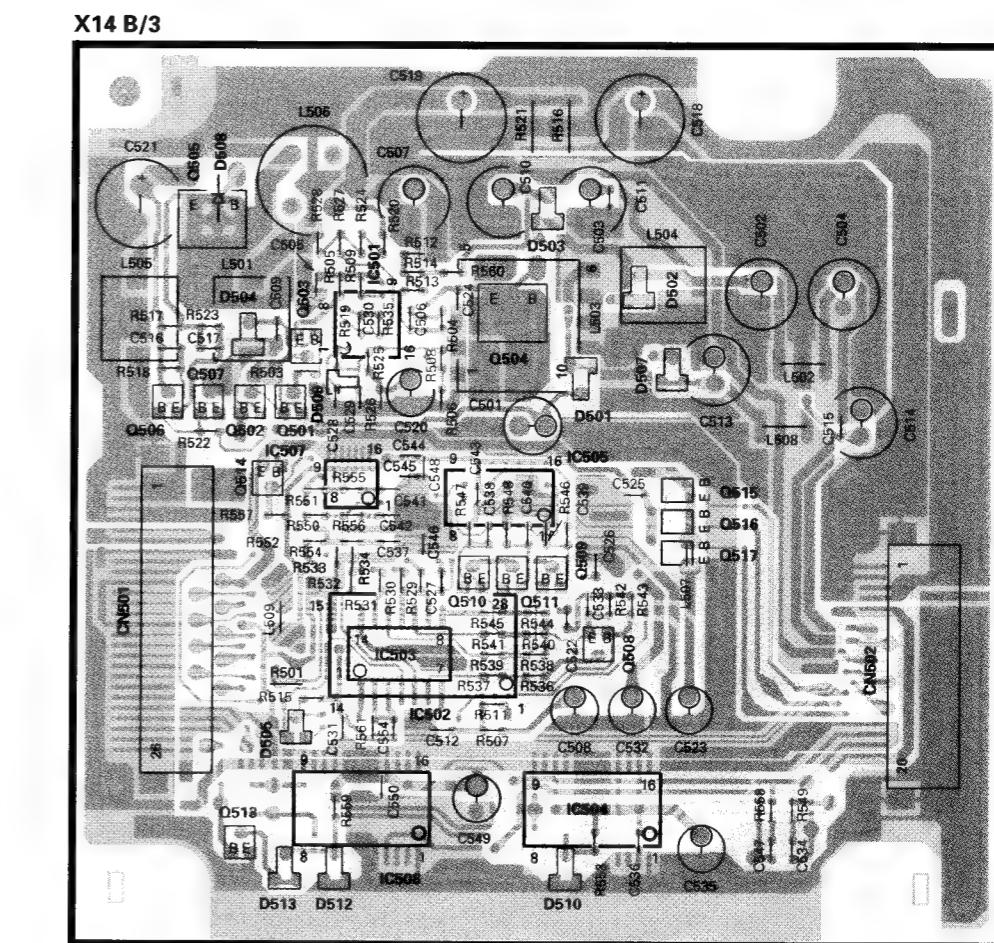
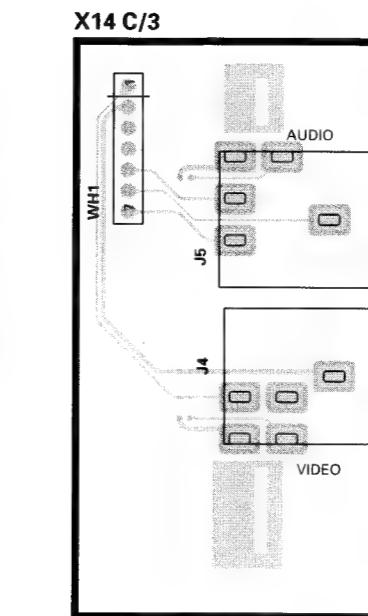
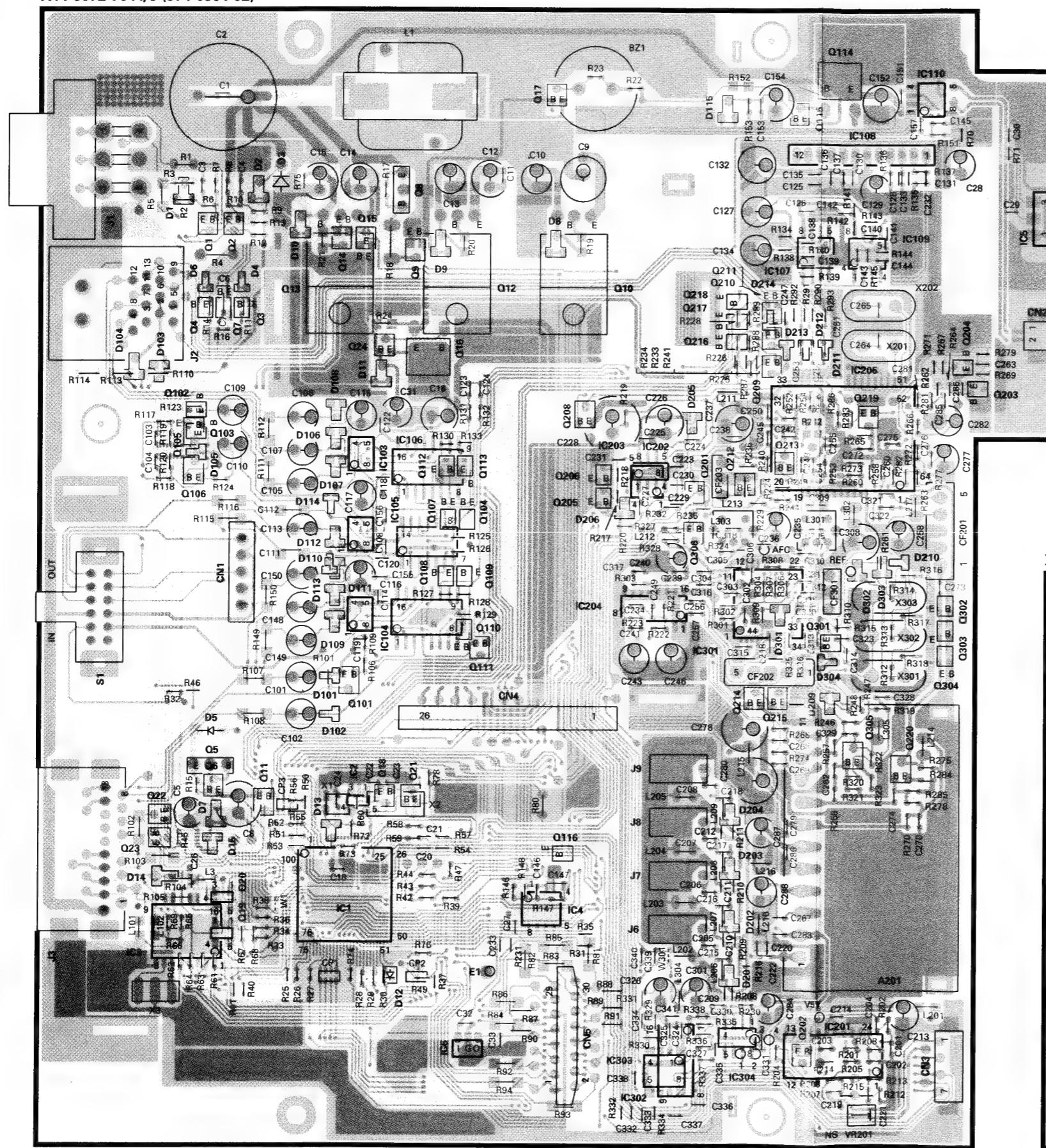
## VIDEO CONTROL UNIT

X14-6072-70 A/3 (J74-0904-02)

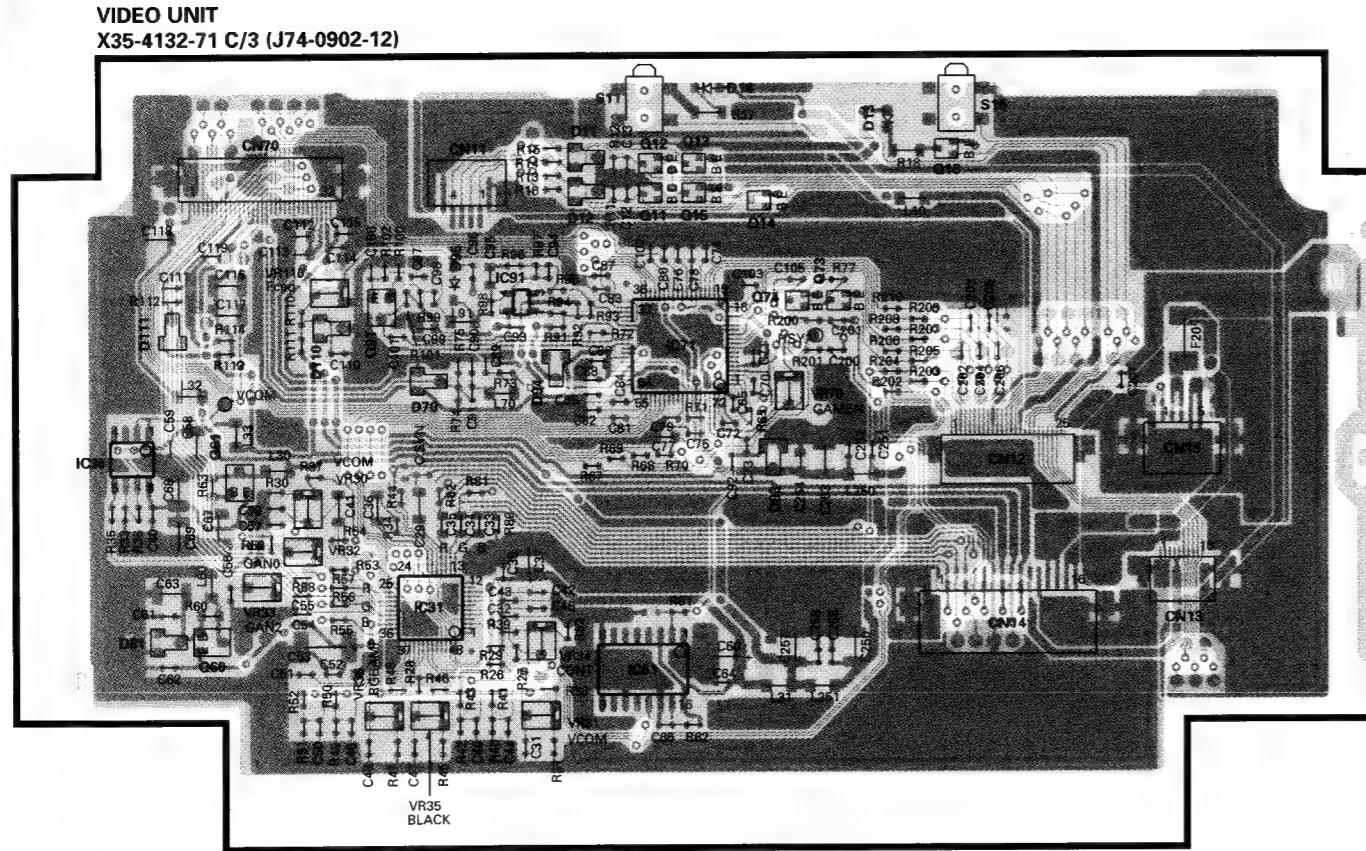


## PC BOARD(Foil side view)

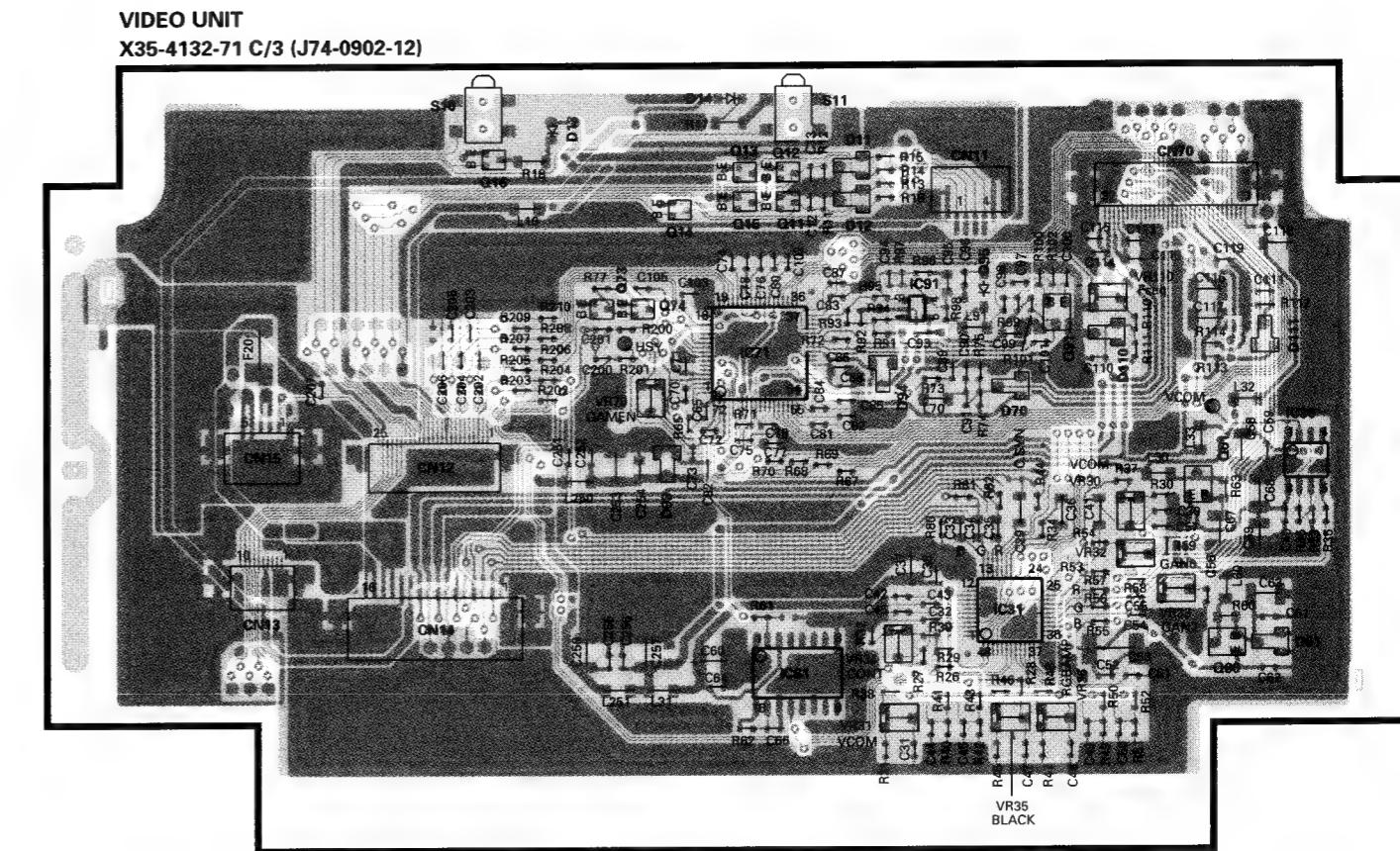
**VIDEO CONTROL UNIT**  
**X14-6072-70 A/3 (J74-0904-02)**



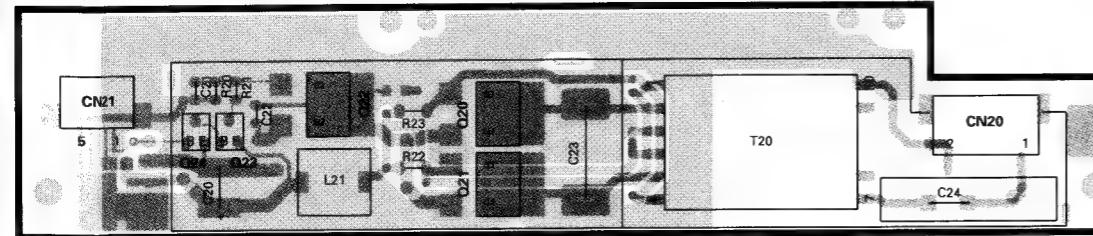
## PC BOARD(Component side view)



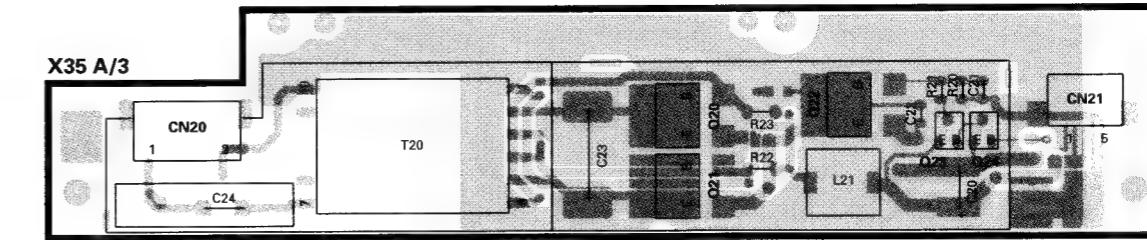
## PC BOARD(Foil side view



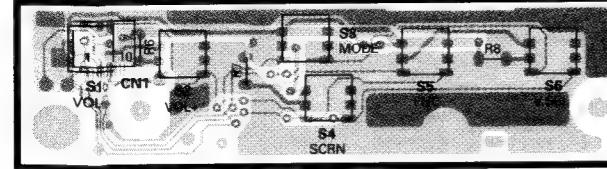
X35 A/3



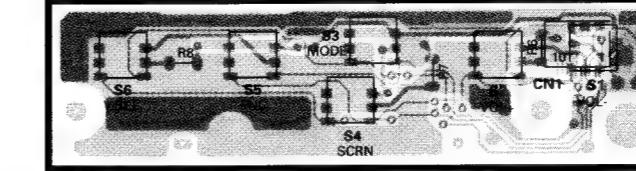
X35 A

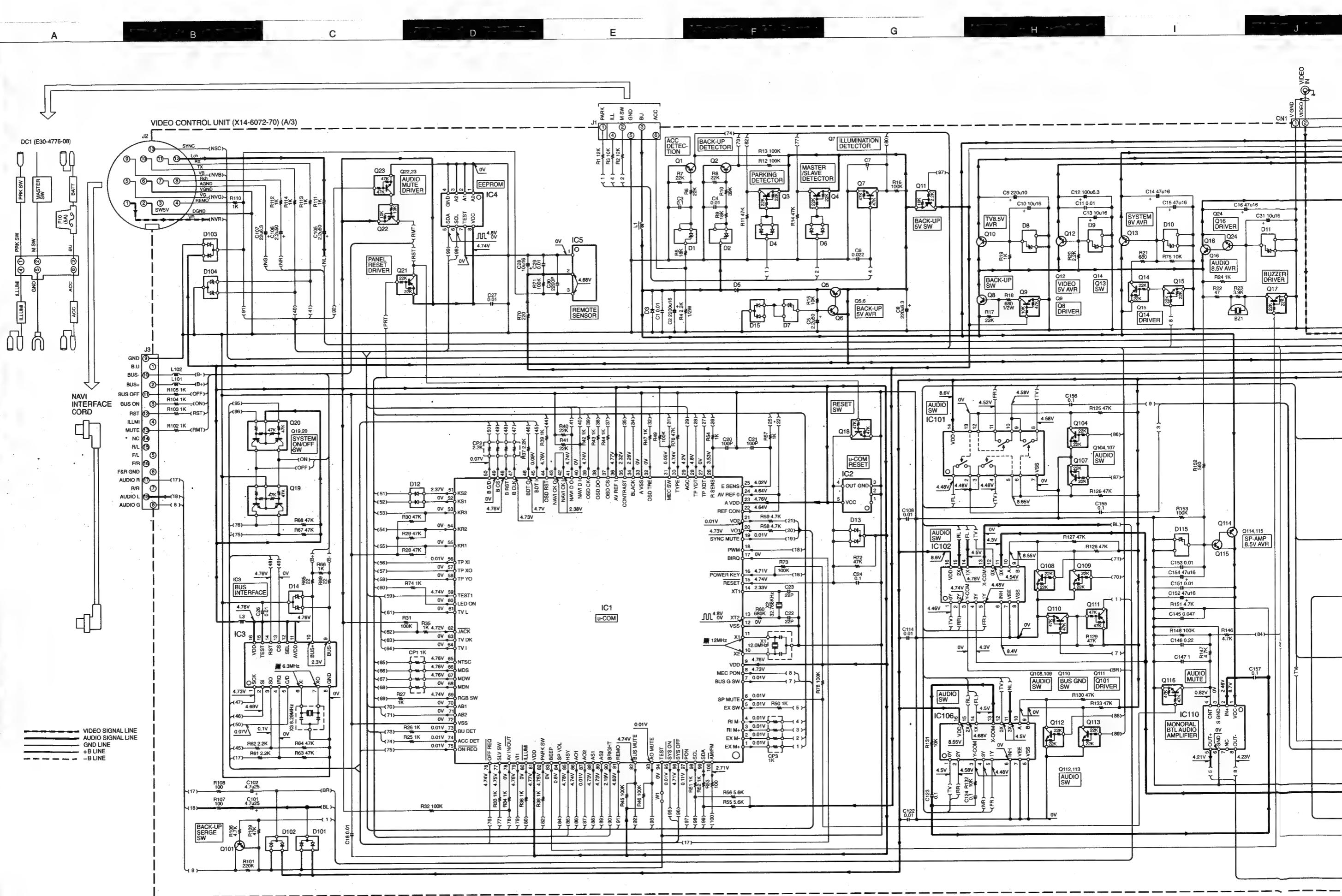


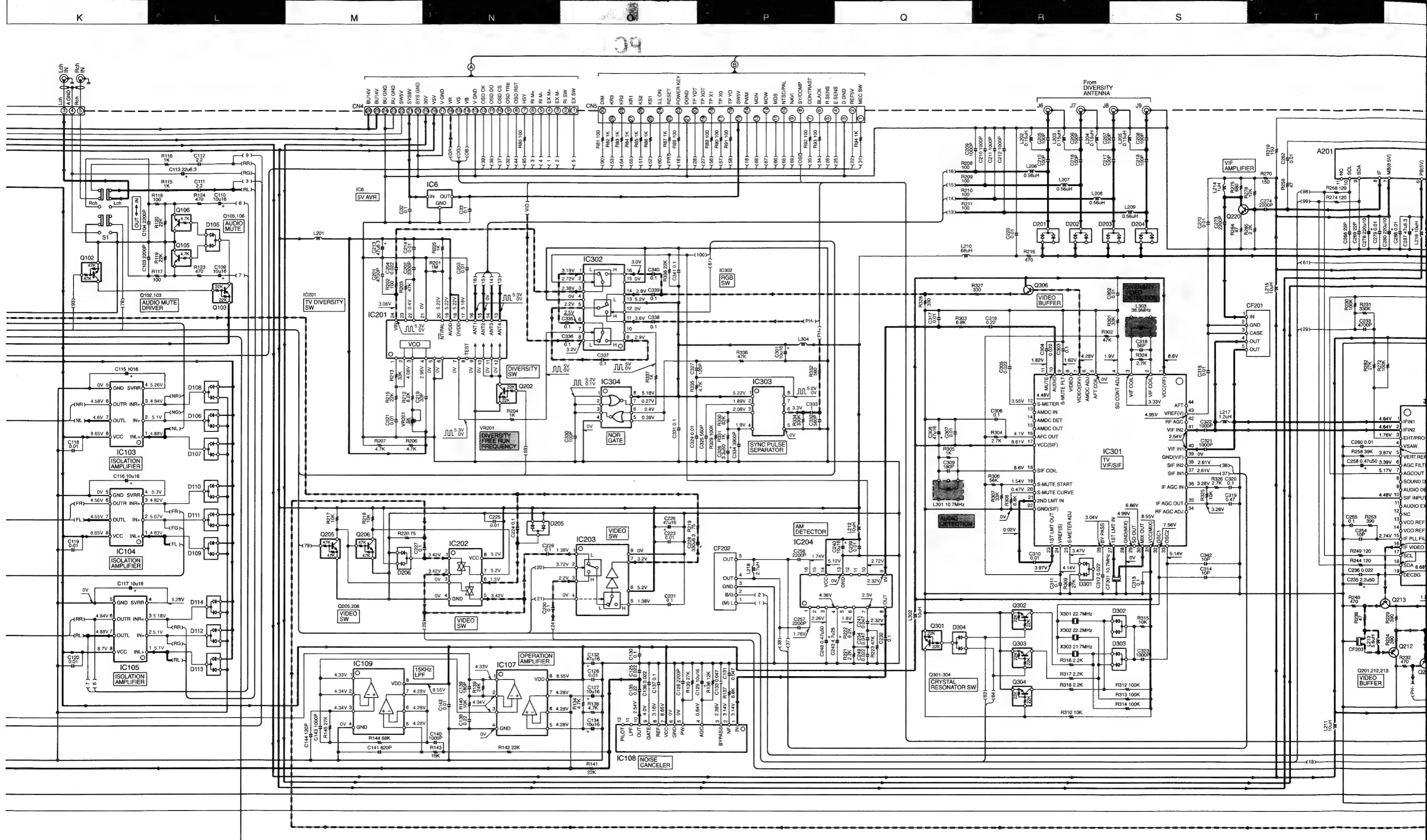
**X35 B/3**



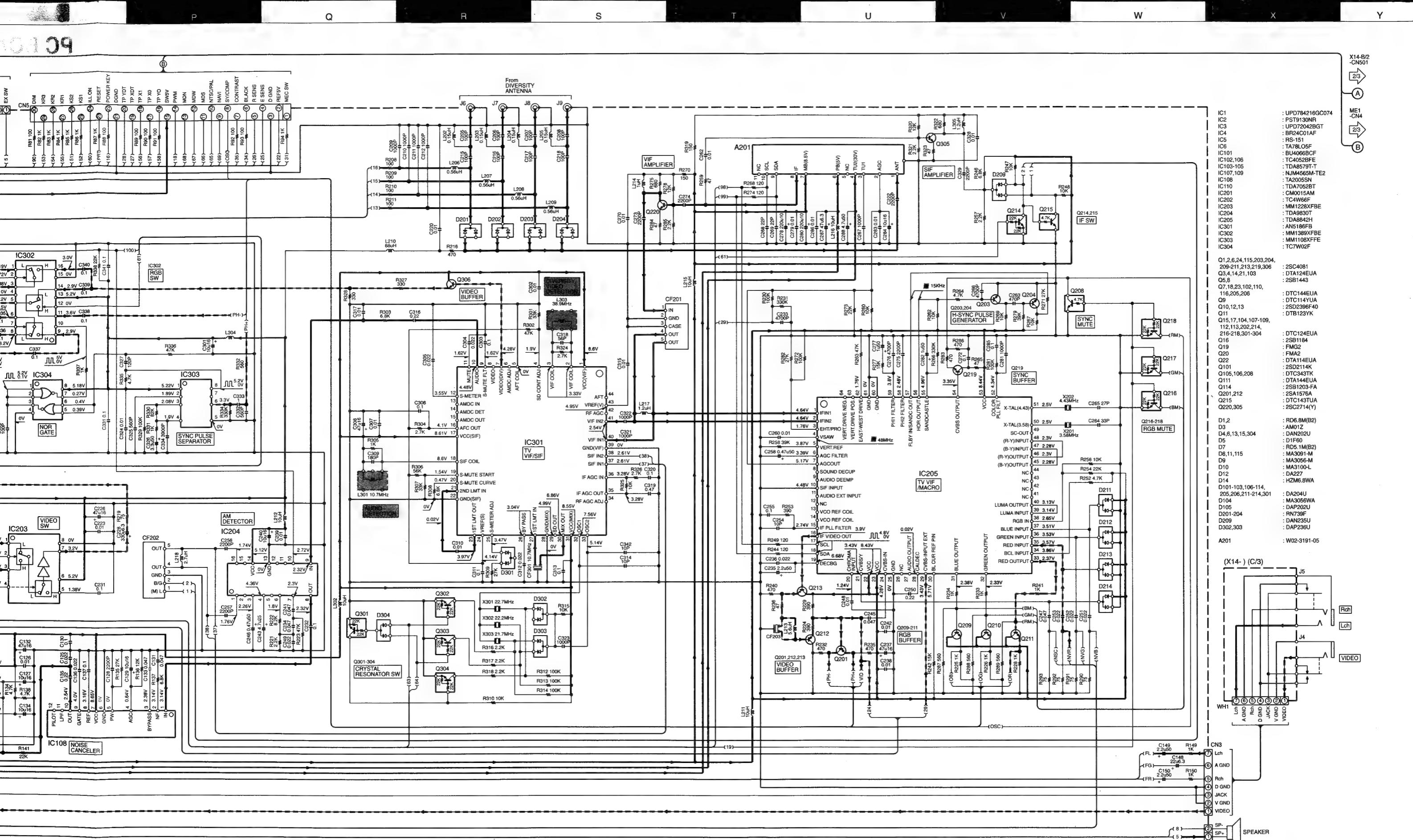
X35 B







**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  $\Delta$  indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

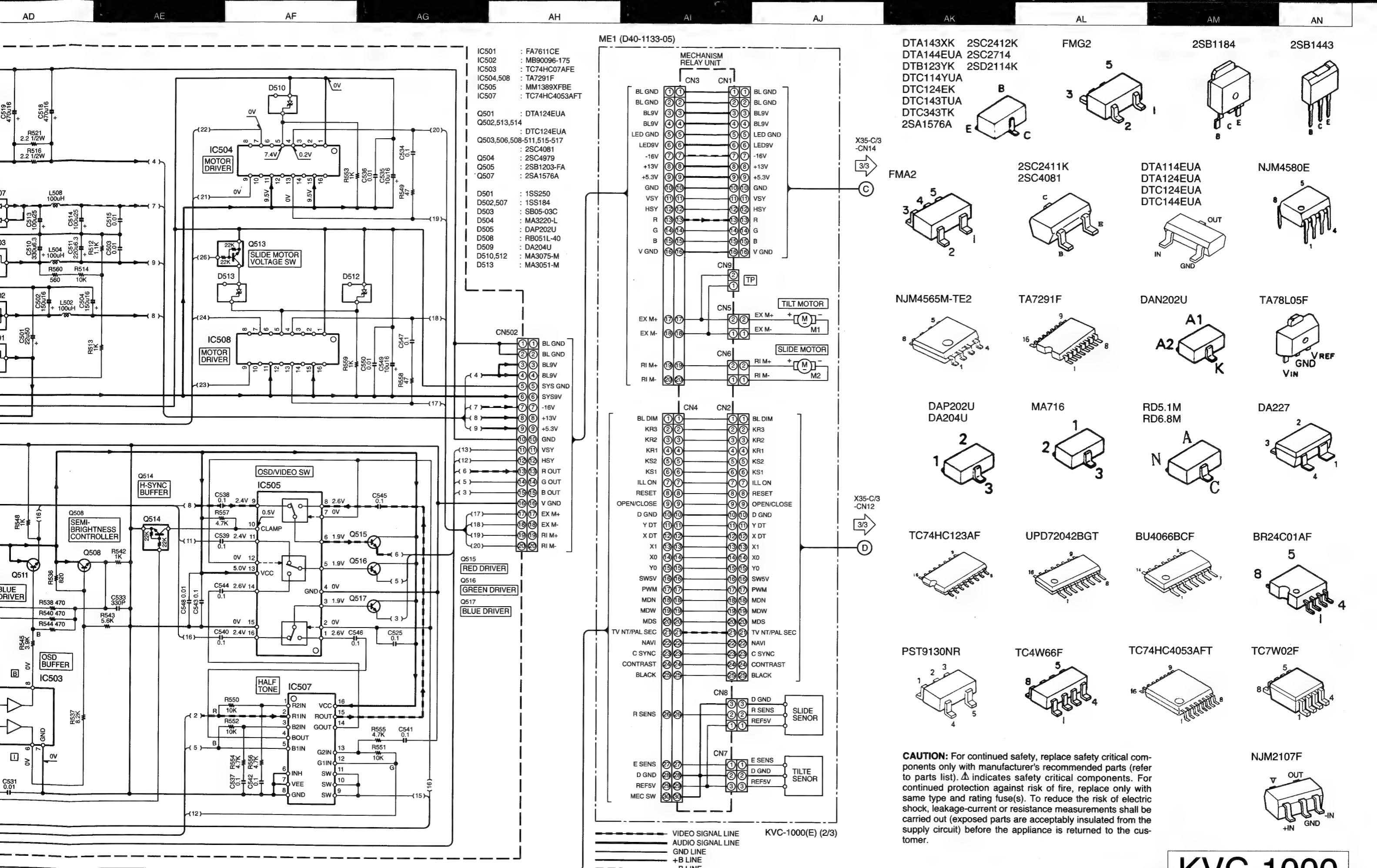


**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  $\Delta$  indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

**KVC-1000**

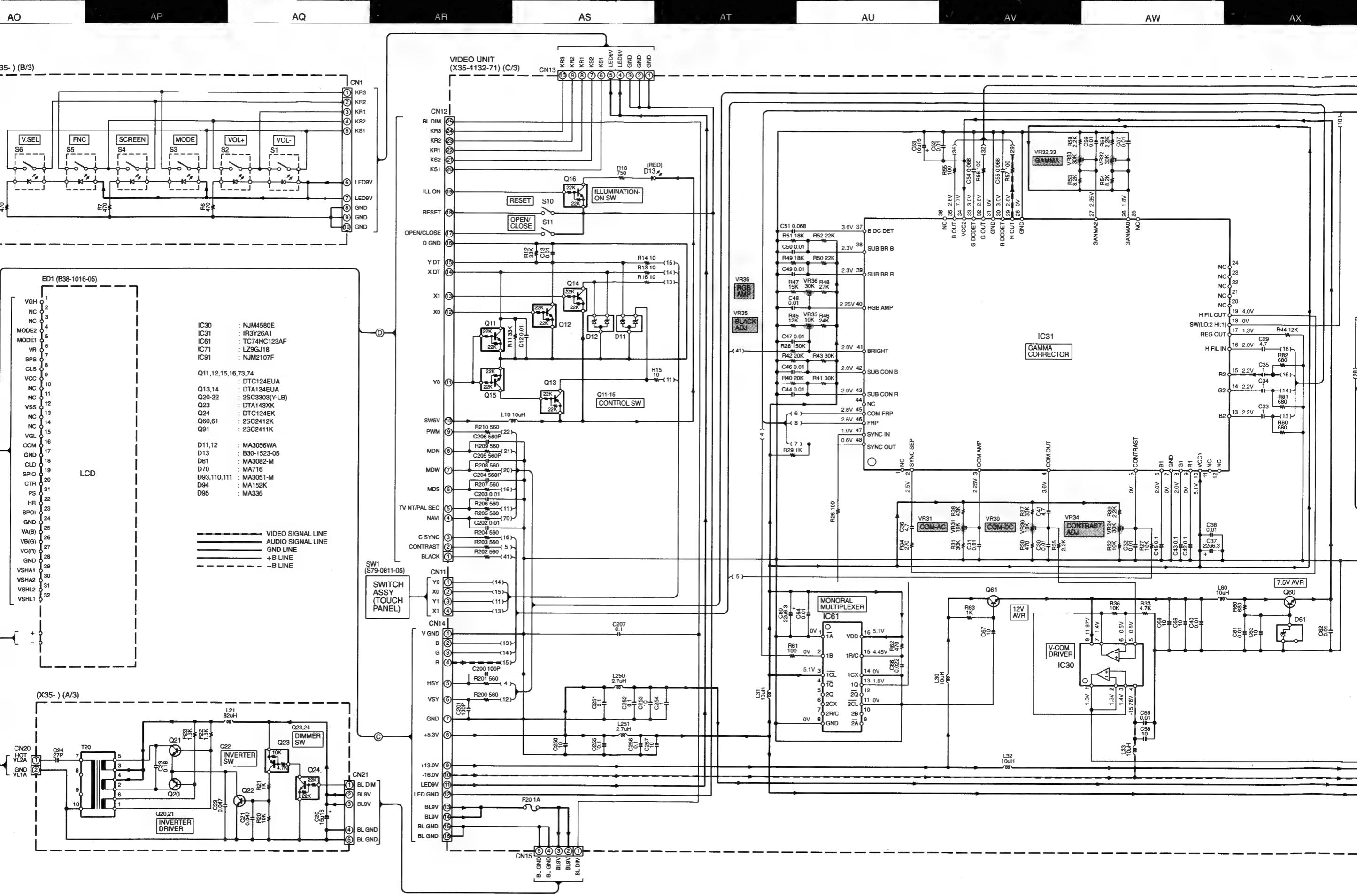
**KENWOOD**



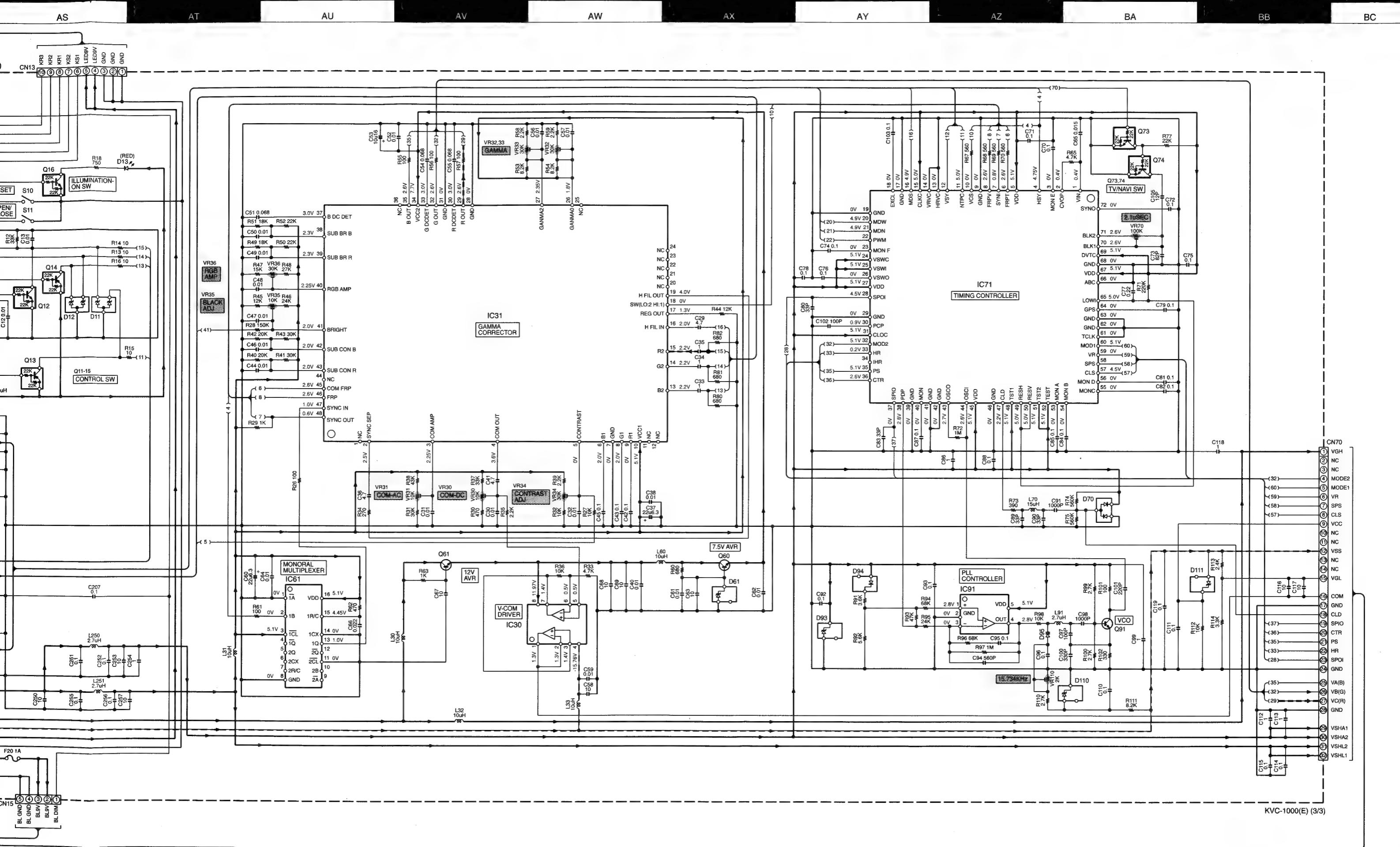


**KVC-1000**

**KENWOOD**



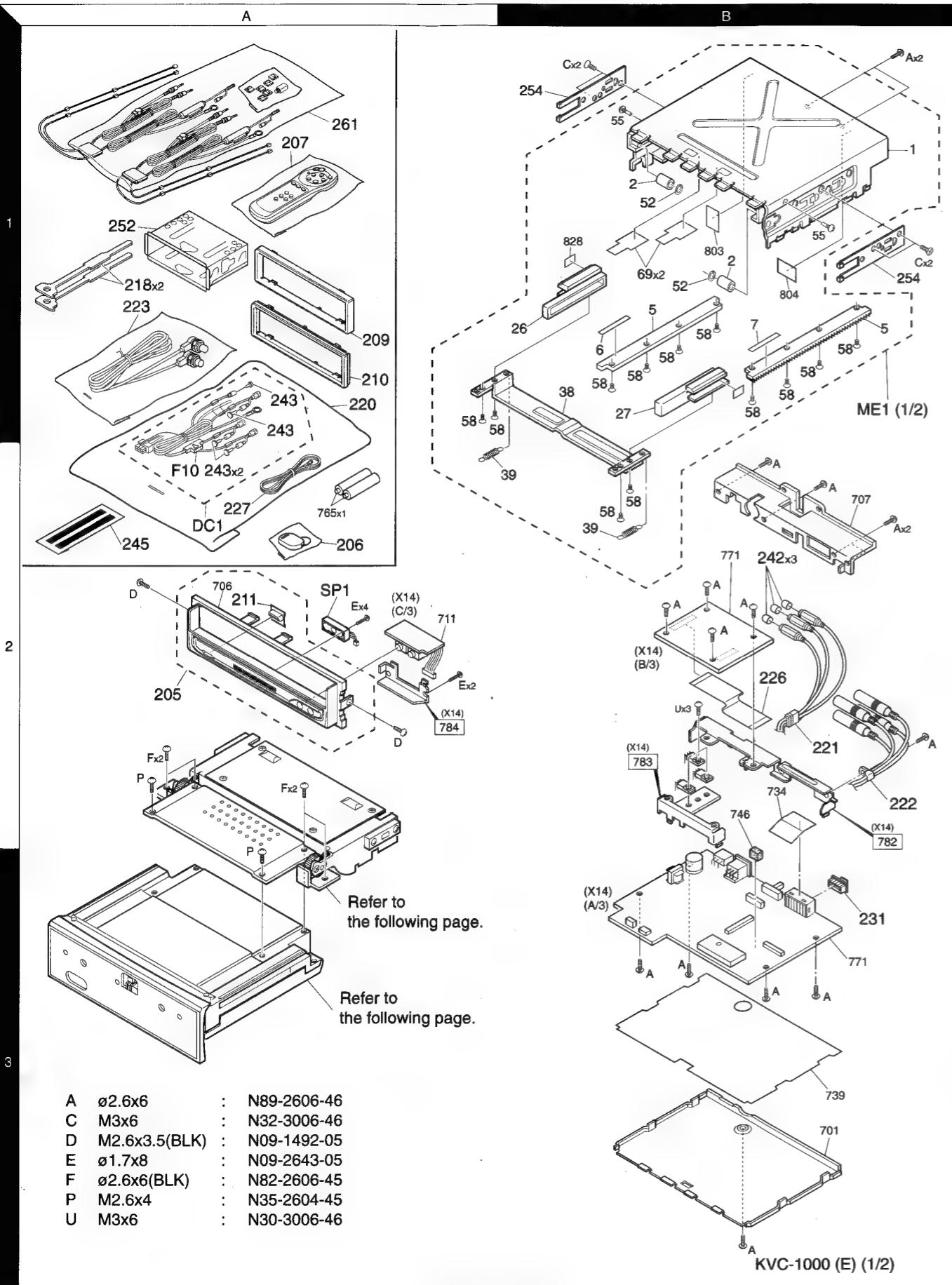
**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  $\Delta$  indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.



**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  $\Delta$  indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

**KVC-1000**  
**KENWOOD**

## EXPLODED VIEW

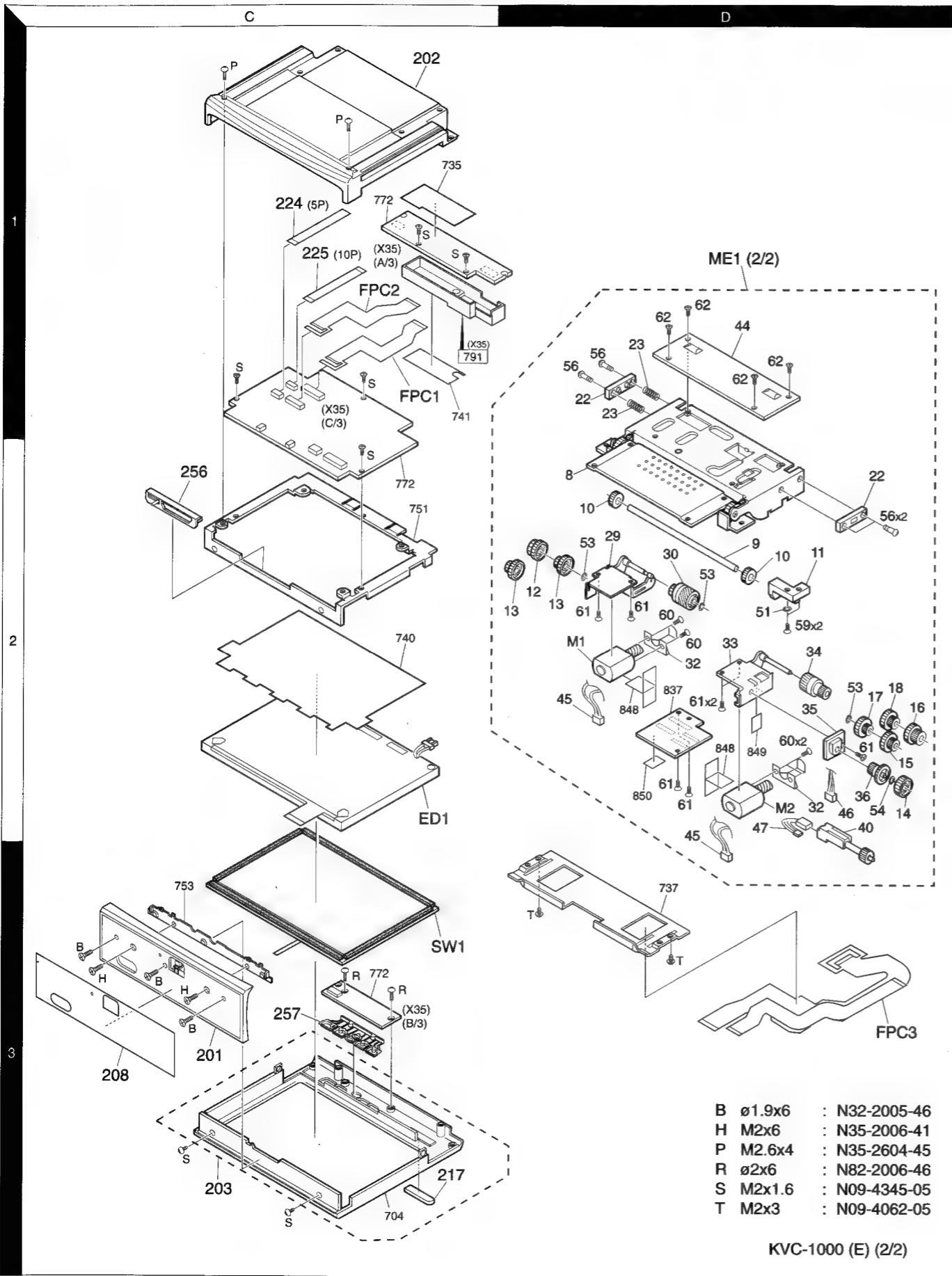


# KVC-1000

## EXPLODED VIEW

# KVC-1000

## PARTS LIST



KVC-1000 (E) (2/2)

Parts with exploded numbers larger than 700 are not supplied.

\* New Parts

Parts without Part No. are not supplied.  
Les articles non mentionnés dans le Part No. ne sont pas fournis.  
Teile ohne Parts No. werden nicht geliefert.

Ref. No.	A d d	N e w	Parts No.	Description	Desti- nation
<b>KVC-1000</b>					
201	3C	*	A21-4005-02	DRESSING PANEL	
202	1C	*	A46-1646-01	REAR COVER	
203	3C	*	A64-1818-02	PANEL ASSY	
205	2A	*	A64-1822-03	PANEL ASSY	
206	2A		A70-0886-05	REMOTE CONTROLLER (Smaller one)	
207	1A	*	A70-2002-05	REMOTE CONTROLLER (Larger one)	
208	3C	*	B03-3055-04	DRESSING PLATE	
209	1A	*	B07-2177-02	ESCUtCHEON (Thicker one)	
210	1A	*	B07-2178-02	ESCUtCHEON (Thinner one)	
211	2A		B10-3073-04	FRONT GLASS	
217	3C		B43-1240-04	KENWOOD BADGE	
			B46-0100-50	WARRANTY CARD	
			B46-0612-14	ID CARD	
		*	B64-1454-00	INST. MANUAL (ENGLISH,FRENCH)	
		*	B64-1455-00	INST. MANUAL (GERMAN,DUTCH)	
		*	B64-1456-00	INST. MANUAL (ITALIAN,SPANISH)	
		*	B64-1457-00	INST. MANUAL (PORTUGUESE)	
ED1	2C	*	B38-1016-05	LIQUID CRYSTAL	
ME1	1A	*	D10-4395-04	LEVER	
	1B	*	D40-1133-05	MECHANISM ASSY	
220	1A	*	E30-4744-05	DC CORD ASSY	
221	2B		E30-4745-05	CORD WITH CONNECTOR	
222	2B		E30-4746-05	CORD WITH PLUG	
223	1A		E30-4747-05	CONNECTING CORD ASSY	
224	1C		E39-0309-05	FLAT CABLE (5-PIN)	
225	1C		E39-0310-05	FLAT CABLE (10-PIN)	
226	2B		E39-0311-05	FLAT CABLE (26-PIN)	
227	2A		E30-4777-08	CONNECTING CORD	
DC1	2A	*	E30-4776-08	DC CORD	
231	3B		F07-1079-05	COVER	
242	2B		F29-0049-05	INSULATING COVER	
243	1A		F29-0079-05	TERMINAL COVER	
F10	2A		F52-0004-05	FUSE (5A)	
245	2A		G11-1860-05	CUSHION	
		*	H10-4667-02	POLYSTYRENE FOAMED FIXTURE	
		*	H10-4668-02	POLYSTYRENE FOAMED FIXTURE	
			H25-0337-04	PROTECTION BAG (180X300X0.03)	
			H25-1115-04	PROTECTION BAG	
		*	H54-1513-03	ITEM CARTON CASE	
252	1A		J21-7881-03	MOUNTING HARDWARE ASSY	
254	1B	*	J21-9473-04	MOUNTING HARDWARE	
FPC1	1C		J84-0102-03	FLEX. PRINTED WIRING BOARD	
FPC2	1C		J84-0103-03	FLEX. PRINTED WIRING BOARD	
FPC3	3D		J84-0108-03	FLEX. PRINTED WIRING BOARD	
256	2C	*	K25-1075-13	KNOB	
257	3C		K25-1076-23	KNOB (MODE/SCRN,FNC/V_SEL)	
A	2B		N89-2606-46	BINDING HEAD TAPtITE SCREW	
B	3C		N32-2005-46	FLAT HEAD MACHIN SCREW	
C	1B		N32-3006-46	FLAT HEAD MACHIN SCREW	
D	1A		N09-1492-05	MACHINE SCREW (2.6X3.5)	
C1			CK73GB1H103K	CHIP C	0.010UF
C2			C90-2843-05	ELECTRO	2200UF
C3			CK73GB1C104K	CHIP C	0.10UF
C4			CK73GB1H103K	CHIP C	0.010UF
C5			CE04NW1H2R2M	ELECTRO	2.2UF
C6			CK73GB1H223K	CHIP C	0.022UF
C7			CK73EB1C105K	CHIP C	1.0UF
C8			CE04NW0J221M	ELECTRO	220UF
C9			CE04DW1A221M	ELECTRO	220UF
C10			CE04NW1C100M	ELECTRO	10UF
C11			CK73GB1H103K	CHIP C	0.010UF
C12			CE04NW0J101M	ELECTRO	100UF
C13			CE04NW1C100M	ELECTRO	10UF
C14		-16	CE04NW1C470M	ELECTRO	47UF
C18			CK73GB1H103K	CHIP C	0.010UF
C20		,21	CC73GCH1H101J	CHIP C	100PF
C22		,23	CC73GCH1H220J	CHIP C	22PF
C24			CK73GB1C104K	CHIP C	0.10UF
C26		,27	CK73GB1H103K	CHIP C	0.010UF
C28			CE04NW1C100M	ELECTRO	10UF
C29			CK73GB1H103K	CHIP C	0.010UF
C30			CK73GB1H222K	CHIP C	2200PF
C31			CE04NW1C100M	ELECTRO	10UF
C32		,33	CK73GB1C104K	CHIP C	0.10UF
C101		,102	C90-2599-05	ELECTRO	4.7UF
C103		,104	CK73GB1H222K	CHIP C	2200PF
C105		,106	C90-2610-05	ELECTRO	2.2UF
C107			CE04CW0J220M	ELECTRO	22UF
C108			CK73GB1H103K	CHIP C	0.010UF
C109		,110	C90-2597-05	ELECTRO	10UF
C111		,112	CK73EB1C225K	CHIP C	2.2UF
C113			CE04CW0J220M	ELECTRO	22UF
C114			CK73GB1H103K	CHIP C	0.010UF
C115		,117	C90-2597-05	ELECTRO	10UF
C118		,120	CK73GB1H103K	CHIP C	0.010UF
C122			CK73GB1H103K	CHIP C	0.010UF
C123		,124	CK73GB1C104K	CHIP C	0.10UF
C125			CK73GB1H223K	CHIP C	0.022UF
C126			CK73GB1H103K	CHIP C	0.010UF
C127			CE04NW1C100M	ELECTRO	10UF
C128			CK73GB1H222K	CHIP C	2200PF
C129			CE04NW1C100M	ELECTRO	10UF

E : Europe

W : Without Europe

M : Other Areas

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▲ indicates safety critical components.

# KVC-1000

## PARTS LIST

\* New Parts  
 Parts without Part No. are not supplied.  
 Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.  
 Teile ohne **Parts No.** werden nicht geliefert.

(X14-6072-70)

Ref. No.	A d d e d e w	Parts No.	Description			Desti- nation
C130		CK73GB1C104K	CHIP C	0.10UF	K	
C131		CK73GB1C473K	CHIP C	0.047UF	K	
C132		CE04NW1C470M	ELECTRO	47UF	16WV	
C133		CK73GB1C473K	CHIP C	0.047UF	K	
C134		CE04NW1C100M	ELECTRO	10UF	16WV	
C135		CK73GB1A224K	CHIP C	0.22UF	K	
C136		CK73GB1H223K	CHIP C	0.022UF	K	
C137		CK73GB1C104K	CHIP C	0.10UF	K	
C138		CK73GB1A224K	CHIP C	0.22UF	K	
C139		CC73GCH1H181J	CHIP C	180PF	J	
C140		CK73GB1H102K	CHIP C	1000PF	K	
C141		CK73GB1H821K	CHIP C	820PF	K	
C142		CK73GB1H103K	CHIP C	0.010UF	K	
C143		CK73GB1H102K	CHIP C	1000PF	K	
C144		CC73GCH1H121J	CHIP C	120PF	J	
C145		CK73GB1C473K	CHIP C	0.047UF	K	
C146		CK73GB1A224K	CHIP C	0.22UF	K	
C147		CK73FB1A105K	CHIP C	1.0UF	K	
C148		CE04CW0J220M	ELECTRO	22UF	6.3WV	
C149,150		C90-2610-05	ELECTRO	2.2UF	50WV	
C151		CK73GB1H103K	CHIP C	0.010UF	K	
C152		CE04NW1C470M	ELECTRO	47UF	16WV	
C153		CK73GB1H103K	CHIP C	0.010UF	K	
C154		CE04NW1C470M	ELECTRO	47UF	16WV	
C155-157		CK73GB1C104K	CHIP C	0.10UF	K	
C201		CK73GB1H472K	CHIP C	4700PF	K	
C202		CK73GB1H332K	CHIP C	3300PF	K	
C203		CK73GB1H103K	CHIP C	0.010UF	K	
C204		CK73GB1H223K	CHIP C	0.022UF	K	
C205-208		CC73GCH1H101J	CHIP C	100PF	J	
C209-212		CK73GB1H102K	CHIP C	1000PF	K	
C213		CE04NW0J470M	ELECTRO	47UF	6.3WV	
C214		CK73GB1H103K	CHIP C	0.010UF	K	
C215-218		CC73GCH1H101J	CHIP C	100PF	J	
C219		CC73GCH1H330J	CHIP C	33PF	J	
C220,221		CK73GB1H103K	CHIP C	0.010UF	K	
C222		CK73GB1H222K	CHIP C	2200PF	K	
C223		CK73GB1H103K	CHIP C	0.010UF	K	
C224		CK73GB1C104K	CHIP C	0.10UF	K	
C225		CK73GB1H103K	CHIP C	0.010UF	K	
C226		CE04NW1C470M	ELECTRO	47UF	16WV	
C227		CK73GB1C104K	CHIP C	0.10UF	K	
C228		CE04CW0J331M	ELECTRO	330UF	6.3WV	
C229-232		CK73GB1C104K	CHIP C	0.10UF	K	
C233		CK73GB1H472K	CHIP C	4700PF	K	
C234		CK73GB1C473K	CHIP C	0.047UF	K	
C235		C90-2610-05	ELECTRO	2.2UF	50WV	
C236		CK73GB1H223K	CHIP C	0.022UF	K	
C237		CE04NW1C470M	ELECTRO	47UF	16WV	
C238,239		CK73GB1H103K	CHIP C	0.010UF	K	
C240		C90-2597-05	ELECTRO	10UF	16WV	
C241		CK73GB1C473K	CHIP C	0.047UF	K	
C242		CK73GB1H103K	CHIP C	0.010UF	K	
C243		CE04NW1E4R7M	ELECTRO	4.7UF	25WV	
C245		CK73GB1C473K	CHIP C	0.047UF	K	

△ indicates safety critical components.

E : Europe    K : North America    M : Other Areas  
 W : Without Europe

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# KVC-1000

## PARTS LIST

\* New Parts  
 Parts without Part No. are not supplied.  
 Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.  
 Teile ohne **Parts No.** werden nicht geliefert.

(X14-6072-70)

Ref. No.	A d d e d e w	Parts No.	Description			Desti- nation
C325		CC73GCH1H561J	CHIP C	560PF	J	
C326		CE04NW1H3R3M	ELECTRO	3.3UF	50WV	
C327		CC73GCH1H121J	CHIP C	120PF	J	
C328		CK73GB1H103K	CHIP C	0.010UF	K	
C329		CK73GB1H222K	CHIP C	2200PF	K	
C330		CC73GCH1H101J	CHIP C	100PF	J	
C331		CK73GB1C104K	CHIP C	0.10UF	K	
C332		CK73GB1H561K	CHIP C	560PF	K	
C333		CK73FB1A105K	CHIP C	1.0UF	K	
C334		CK73GB1H392K	CHIP C	3900PF	K	
C335-341		CK73GB1C104K	CHIP C	0.10UF	K	
C342		CC73GCH1H100D	CHIP C	10PF	D	
C501		CE04DW1H220M	ELECTRO	22UF	50WV	
C502		C90-2969-05	ELECTRO	150UF	16WV	
C503		CK73GB1H103K	CHIP C	0.010UF	K	
C504		C90-2969-05	ELECTRO	150UF	16WV	
C505		CK73GF1E104Z	CHIP C	0.10UF	Z	
C506		CK73GB1H472K	CHIP C	4700PF	K	
C507		C90-2966-05	ELECTRO	100UF	16WV	
C508		CE04NW1H010M	ELECTRO	1.0UF	50WV	
C509		CK73GF1E104Z	CHIP C	0.10UF	Z	
C510		C90-2968-05	ELECTRO	330UF	6.3WV	
C511		CE04DW0J221M	ELECTRO	220UF	6.3WV	
C512		CK73GB1C104K	CHIP C	0.10UF	K	
C513,514		C90-2963-05	ELECTRO	100UF	25WV	
C515		CK73GB1H103K	CHIP C	0.010UF	K	
C516		CK73GB1H331K	CHIP C	330PF	K	
C517		CK73GB1H682K	CHIP C	6800PF	K	
C518,519		C90-2975-05	ELECTRO	470UF	16WV	
C520		CE04NW1C100M	ELECTRO	10UF	16WV	
C521		C90-2957-05	ELECTRO	470UF	16WV	
C522		CK73GB1C104K	CHIP C	0.10UF	K	
C523		CE04NW1C100M	ELECTRO	10UF	16WV	
C524		CK73GB1H103K	CHIP C	0.010UF	K	
C525		CK73GF1E104Z	CHIP C	0.10UF	Z	
C526,527		CK73GB1C104K	CHIP C	0.10UF	K	
C528		CC73GCH1H561J	CHIP C	560PF	J	
C529,530		CK73GB1H223K	CHIP C	0.022UF	K	
C531		CK73GB1H103K	CHIP C	0.010UF	K	
C532		CE04NW1C100M	ELECTRO	10UF	16WV	
C533		CK73GB1H331K	CHIP C	330PF	K	
C534		CK73GB1C104K	CHIP C	0.10UF	K	
C535		CE04NW1C100M	ELECTRO	10UF	16WV	
C536		CK73GB1H103K	CHIP C	0.010UF	K	
C537		CK73GB1C104K	CHIP C	0.10UF	K	
C538-540		CK73GF1E104Z	CHIP C	0.10UF	Z	
C541,542		CK73GB1C104K	CHIP C	0.10UF	K	
C543-546		CK73GF1E104Z	CHIP C	0.10UF	Z	
C547		CK73GB1C104K	CHIP C	0.10UF	K	
C548		CK73GB1H103K	CHIP C	0.010UF	K	
C549		CE04NW1C100M	ELECTRO	10UF	16WV	
C550		CK73GB1H103K	CHIP C	0.010UF	K	
C554		CC73GCH1H561J	CHIP C	560PF	J	
CN1		E40-3240-05	PIN ASSY			

E : Europe    K : North America    M : Other Areas  
 W : Without Europe

△ indicates safety critical components.

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# KVC-1000

## PARTS LIST

\* New Parts

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Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

(X14-6072-70)

Ref. No.	A N d d	Parts No.	Description	Desti- nation
CP1		R90-0724-05	MULTI-COMP 1K X4	
CP2		R90-0722-05	MULTI-COMP 2.2K X4	
CP3		R90-0724-05	MULTI-COMP 1K X4	
R1 ,2		RK73EB2B123J	CHIP R 12K J 1/8W	
R3		RK73EB2B103J	CHIP R 10K J 1/8W	
R4	* R92-3095-05	CARBON FILM 2.2K	J 1/2W	
R5		RK73EB2B183J	CHIP R 18K J 1/8W	
R6 -8		RK73GB1J223J	CHIP R 22K J 1/16W	
R9		RK73GB1J183J	CHIP R 18K J 1/16W	
R10		RK73GB1J393J	CHIP R 39K J 1/16W	
R11		RK73GB1J473J	CHIP R 47K J 1/16W	
R12 ,13		RK73GB1J104J	CHIP R 100K J 1/16W	
R14		RK73GB1J473J	CHIP R 47K J 1/16W	
R15		RK73GB1J103J	CHIP R 10K J 1/16W	
R16		RK73GB1J104J	CHIP R 100K J 1/16W	
R17		RK73GB1J223J	CHIP R 22K J 1/16W	
R18		R92-2063-05	CHIP R 680 J 1/2W	
R19		RK73FB2A102J	CHIP R 1.0K J 1/10W	
R20		RK73FB2A222J	CHIP R 2.2K J 1/10W	
R21		RK73FB2A681J	CHIP R 680 J 1/10W	
R22		RK73GB1J470J	CHIP R 47 J 1/16W	
R23		RK73GB1J392J	CHIP R 3.9K J 1/16W	
R24		RK73FB2A102J	CHIP R 1.0K J 1/10W	
R25 -27		RK73GB1J102J	CHIP R 1.0K J 1/16W	
R28 -30		RK73GB1J473J	CHIP R 47K J 1/16W	
R31 ,32		RK73GB1J104J	CHIP R 100K J 1/16W	
R33 -36		RK73GB1J102J	CHIP R 1.0K J 1/16W	
R37		RK73GB1J222J	CHIP R 2.2K J 1/16W	
R38 ,39		RK73GB1J102J	CHIP R 1.0K J 1/16W	
R40 ,41		RK73GB1J223J	CHIP R 22K J 1/16W	
R42 -44		RK73GB1J102J	CHIP R 1.0K J 1/16W	
R45 ,46		RK73GB1J104J	CHIP R 100K J 1/16W	
R47		RK73GB1J102J	CHIP R 1.0K J 1/16W	
R49		RK73GB1J104J	CHIP R 100K J 1/16W	
R50 -52		RK73GB1J102J	CHIP R 1.0K J 1/16W	
R53		RK73GB1J101J	CHIP R 100 J 1/16W	
R54		RK73GB1J102J	CHIP R 1.0K J 1/16W	
R55 ,56		RK73GB1J562J	CHIP R 5.6K J 1/16W	
R57		RK73GB1J102J	CHIP R 1.0K J 1/16W	
R58 ,59		RK73GB1J472J	CHIP R 4.7K J 1/16W	
R60		RK73GB1J684J	CHIP R 680K J 1/16W	
R61 ,62		RK73GB1J222J	CHIP R 2.2K J 1/16W	
R63 ,64		RK73GB1J473J	CHIP R 47K J 1/16W	
R65		RK73GB1J220J	CHIP R 22 J 1/16W	
R66		RK73GB1J102J	CHIP R 1.0K J 1/16W	
R67 ,68		RK73GB1J473J	CHIP R 47K J 1/16W	
R69		RK73GB1J220J	CHIP R 22 J 1/16W	
R70		RK73GB1J221J	CHIP R 220 J 1/16W	
R71		RK73GB1J104J	CHIP R 100K J 1/16W	
R72		RK73GB1J473J	CHIP R 47K J 1/16W	
R73		RK73GB1J104J	CHIP R 100K J 1/16W	
R74		RK73GB1J102J	CHIP R 1.0K J 1/16W	
R75		RK73GB1J103J	CHIP R 10K J 1/16W	
R76		RK73GB1J473J	CHIP R 47K J 1/16W	
R78		RK73GB1J104J	CHIP R 100K J 1/16W	

E : Europe K : North America M : Other Areas

W : Without Europe

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## PARTS LIST

\* New Parts

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Teile ohne Parts No. werden nicht geliefert.

(X14-6072-70)

Ref. No.	A N d d	Parts No.	Description	Desti- nation
R233,234		RK73GB1J102J	CHIP R 1.0K J 1/16W	
R235		RK73GB1J471J	CHIP R 470 J 1/16W	
R236		RK73GB1J470J	CHIP R 47 J 1/16W	
R240		RK73GB1J471J	CHIP R 470 J 1/16W	
R241		RK73GB1J102J	CHIP R 1.0K J 1/16W	
R242		RK73GB1J153J	CHIP R 15K J 1/16W	
R244		RK73GB1J121J	CHIP R 120 J 1/16W	
R246		RK73GB1J682J	CHIP R 6.8K J 1/16W	
R247,248		RK73GB1J103J	CHIP R 10K J 1/16W	
R249		RK73GB1J121J	CHIP R 120 J 1/16W	
R252		RK73GB1J472J	CHIP R 4.7K J 1/16W	
R253		RK73GB1J391J	CHIP R 390 J 1/16W	
R254		RK73GB1J223J	CHIP R 22K J 1/16W	
R256		RK73GB1J103J	CHIP R 10K J 1/16W	
R257		RK73GB1J222J	CHIP R 2.2K J 1/16W	
R258		RK73GB1J393J	CHIP R 39K J 1/16W	
R259		RK73GB1J470J	CHIP R 47 J 1/16W	
R260		RK73GB1J103J	CHIP R 10K J 1/16W	
R262		RK73GB1J103J	CHIP R 10K J 1/16W	
R263,264		RK73GB1J472J	CHIP R 4.7K J 1/16W	
R265		RK73GB1J470J	CHIP R 47 J 1/16W	
R266		RK73GB1J334J	CHIP R 330K J 1/16W	
R267		RK73GB1J103J	CHIP R 10K J 1/16W	
R268		RK73GB1J121J	CHIP R 120 J 1/16W	
R269		RK73GB1J103J	CHIP R 10K J 1/16W	
R270		RK73GB1J151J	CHIP R 150 J 1/16W	
R271		RK73GB1J273J	CHIP R 27K J 1/16W	
R272		RK73GB1J104J	CHIP R 100K J 1/16W	
R273		RK73GB1J223J	CHIP R 22K J 1/16W	
R274		RK73GB1J121J	CHIP R 120 J 1/16W	
R275		RK73GB1J681J	CHIP R 680 J 1/16W	
R277		RK73GB1J153J	CHIP R 15K J 1/16W	
R278		RK73GB1J123J	CHIP R 12K J 1/16W	
R279		RK73GB1J393J	CHIP R 39K J 1/16W	
R281		RK73GB1J104J	CHIP R 100K J 1/16W	
R282		RK73GB1J273J	CHIP R 27K J 1/16W	
R283		RK73GB1J471J	CHIP R 470 J 1/16W	
R284		RK73GB1J470J	CHIP R 47 J 1/16W	
R285		RK73GB1J222J	CHIP R 2.2K J 1/16W	
R286		RK73GB1J471J	CHIP R 470 J 1/16W	
R287-289		RK73GB1J561J	CHIP R 560 J 1/16W	
R290-293		RK73GB1J750J	CHIP R 75 J 1/16W	
R301		RK73GB1J333J	CHIP R 33K J 1/16W	
R302		RK73GB1J473J	CHIP R 47K J 1/16W	
R303		RK73GB1J682J	CHIP R 6.8K J 1/16W	
R304		RK73GB1J272J	CHIP R 2.7K J 1/16W	
R305		RK73GB1J102J	CHIP R 1.0K J 1/16W	
R306		RK73GB1J563J	CHIP R 56K J 1/16W	
R307		RK73GB1J333J	CHIP R 33K J 1/16W	
R308		RK73GB1J682J	CHIP R 6.8K J 1/16W	
R309		RK73GB1J273J	CHIP R 27K J 1/16W	
R310		RK73GB1J103J	CHIP R 10K J 1/16W	
R312-314		RK73GB1J104J	CHIP R 100K J 1/16W	
R315		RK73GB1J103J	CHIP R 10K J 1/16W	
R316-318		RK73GB1J222J	CHIP R 2.2K J 1/16W	
R319		RK73GB1J151J	CHIP R 150 J 1/16W	
R320		RK73GB1J123J	CHIP R 12K J 1/16W	
R321		RK73GB1J222J	CHIP R 2.2K J 1/16W	
R322		RK73GB1J681J	CHIP R 680 J 1/16W	
R323		RK73GB1J470J	CHIP R 47 J 1/16W	
R329		RK73GB1J104J	CHIP R 100K J 1/16W	
R330		RK73GB1J823J	CHIP R 82K J 1/16W	
R331		RK73GB1J102J	CHIP R 1.0K J 1/16W	
R332		RK73GB1J561J	CHIP R 560 J 1/16W	
R334		RK73GB1J334J	CHIP R 330K J 1/16W	
R335		RK73GB1J472J		

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## PARTS LIST

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 Teile ohne Parts No. werden nicht geliefert.

(X14-6072-70)

Ref. No.	A n d d e w	Parts No.	Description			Desti- nation
R544		RK73GB1J471J	CHIP R	470	J	1/16W
R545		RK73GB1J392J	CHIP R	3.9K	J	1/16W
R546-548		RK73GB1J102J	CHIP R	1.0K	J	1/16W
R549		RK73GB1J470J	CHIP R	47	J	1/16W
R550-552		RK73GB1J103J	CHIP R	10K	J	1/16W
R553		RK73GB1J102J	CHIP R	1.0K	J	1/16W
R554-557		RK73GB1J472J	CHIP R	4.7K	J	1/16W
R558		RK73GB1J470J	CHIP R	47	J	1/16W
R559		RK73GB1J102J	CHIP R	1.0K	J	1/16W
R560		RN73GH1J561D	CHIP R	560	D	1/16W
R561		RK73GB1J103J	CHIP R	10K	J	1/16W
VR201		R32-0234-05	SEMI FIXED VARIABLE R. (			
W1		R92-1252-05	0 OHM			
S1		S62-0847-05	SLIDE SWITCH			
BZ1		T95-0228-05	PIEZOELECTRIC VIBRATOR			
D1 ,2		RD6.8M(B2)	ZENER DIODE			
D3		AM01Z	DIODE			
D4		DAN202U	DIODE			
D5		D1F60	DIODE			
D6		DAN202U	DIODE			
D7		RD5.1M(B2)	ZENER DIODE			
D8		MA3091-M	ZENER DIODE			
D9		MA3056-M	ZENER DIODE			
D10		MA3100-L	ZENER DIODE			
D11		MA3091-M	ZENER DIODE			
D12		DA227	DIODE			
D13		DAN202U	DIODE			
D14		HZM6.8WA	ZENER DIODE			
D15		DAN202U	DIODE			
D101-103		DA204U	DIODE			
D104		MA3056WA	ZENER DIODE			
D105		DAP202U	DIODE			
D106-114		DA204U	DIODE			
D115		MA3091-M	ZENER DIODE			
D201-204	*	RN739F	DIODE			
D205,206		DA204U	DIODE			
D209		DAN235U	DIODE			
D211-214		DA204U	DIODE			
D301		DA204U	DIODE			
D302,303	*	DAP236U	DIODE			
D304		DAN202U	DIODE			
D501		1SS250	DIODE			
D502		1SS184	DIODE			
D503		SB05-03C	DIODE			
D504		MA3220-L	ZENER DIODE			
D505		DAP202U	DIODE			
D507		1SS184	DIODE			
D508		RB051L-40	DIODE			
D509		DA204U	DIODE			
D510		MA3075-M	ZENER DIODE			
D512		MA3075-M	ZENER DIODE			
D513		MA3051-M	ZENER DIODE			
IC1	*	UPD784216GC074	MI-COM IC			

# KVC-1000

## PARTS LIST

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(X35-4132-71)

Ref. No.	A n d d e w	Parts No.	Description			Desti- nation
Q107-109		DTC124EUA	DIGITAL TRANSISTOR			
Q110		DTC144EUA	DIGITAL TRANSISTOR			
Q111		DTA144EUA	DIGITAL TRANSISTOR			
Q112,113		DTC124EUA	DIGITAL TRANSISTOR			
Q114		2SB1203-FA	TRANSISTOR			
Q115		2SC4081	TRANSISTOR			
Q116		DTC144EUA	DIGITAL TRANSISTOR			
Q201		2SA1576A	TRANSISTOR			
Q202		DTC124EUA	DIGITAL TRANSISTOR			
Q203,204		2SC4081	TRANSISTOR			
Q205,206		DTC144EUA	DIGITAL TRANSISTOR			
Q208		DTC343TK	DIGITAL TRANSISTOR			
Q209-211		2SC4081	TRANSISTOR			
Q212		2SA1576A	TRANSISTOR			
Q213		2SC4081	TRANSISTOR			
Q214		DTC124EUA	DIGITAL TRANSISTOR			
Q215		DTC143TUA	DIGITAL TRANSISTOR			
Q216-218		DTC124EUA	DIGITAL TRANSISTOR			
Q219		2SC4081	TRANSISTOR			
Q220		2SC2714(Y)	TRANSISTOR			
Q301-304		DTC124EUA	DIGITAL TRANSISTOR			
Q305		2SC2714(Y)	TRANSISTOR			
Q306		2SC4081	TRANSISTOR			
Q501		DTA124EUA	DIGITAL TRANSISTOR			
Q502		DTC124EUA	DIGITAL TRANSISTOR			
Q503		2SC4081	TRANSISTOR			
Q504		2SC4979	TRANSISTOR			
Q505		2SB1203-FA	TRANSISTOR			
Q506		2SC4081	TRANSISTOR			
Q507		2SA1576A	TRANSISTOR			
Q508-511		2SC4081	TRANSISTOR			
Q513,514		DTC124EUA	DIGITAL TRANSISTOR			
Q515-517		2SC4081	TRANSISTOR			
A201	*	W02-3191-05	TUNER ASSY			
VIDEO UNIT (X35-4132-71)						
D13		B30-1523-05	LED			
C12,13		CK73GB1H103K	CHIP C	0.010UF	K	
C20		C92-1362-05	ELECTRO	15UF	16WV	
C21,22		CK73FB1H473K	CHIP C	0.047UF	K	
C23		C91-2174-05	POLYPRO	0.18UF		
C24		C93-1105-05	CERAMIC	27PF		
C29		CK73EF1C475Z	CHIP C	4.7UF	Z	
C30-32		CK73GB1H103K	CHIP C	0.010UF	K	
C33-35		CK73FF1C105Z	CHIP C	1.0UF	Z	
C36		CK73EF1C475Z	CHIP C	4.7UF	Z	
C37		C92-1325-05	CHIP-TAN	22UF	6.3WV	
C38		CK73GB1H103K	CHIP C	0.010UF	K	
C40		CK73GB1H103K	CHIP C	0.010UF	K	
C41		CK73EF1C475Z	CHIP C	4.7UF	Z	
C42,43		CK73GF1E104Z	CHIP C	0.10UF	Z	
C44		CK73GB1H103K	CHIP C	0.010UF	K	
C45		CK73GF1E104Z	CHIP C	0.10UF	Z	
C46-50		CK73GB1H103K	CHIP C	0.010UF	K	
C101		CC73GCH1H221J	CHIP C	220PF	J	
C102		CC73GCH1H101J	CHIP C	100PF	J	
C103		CK73GF1E104Z	CHIP C	0.10UF	Z	
C105		CC73GCH1H120J	CHIP C	12PF	J	
C110,111		CK73GF1E104Z	CHIP C	0.10UF	Z	
C112,113		CK73FF1C105Z	CHIP C	1.0UF	Z	
C114,115		CK73GF1E104Z	CHIP C	0.10UF	Z	
C116,117		CK73DF1E106Z	CERAMIC	10UF		
C118		CK73EB1E105K	CHIP C	1.0UF	K	
C119		CK73GF1E104Z	CHIP C	0.10UF	Z	
C200,201		CC73GCH1H101J	CHIP C	100PF	J	
C202,203		CK73GB1H103K	CHIP C	0.010UF	K	
C204-206		CC73GCH1H561J	CHIP C	560PF	J	
C207		CK73GB1C104K	CHIP C	0.10UF	K	
C250		CK73DF1C106Z	CERAMIC	10UF		
C251,252		CK73GF1E104Z	CHIP C	0.10UF	Z	
C253		CK73DF1C106Z	CERAMIC	10UF		
C254		CK73FF1C105Z	CHIP C	1.0UF	Z	
C255,256		CK73GF1E104Z	CHIP C	0.10UF	Z	
C257		CK73DF1C106Z	CERAMIC	10UF		

E : Europe    K : North America    M : Other Areas  
 W : Without

# PARTS LIST

# KVC-1000

(X35-4132-71)

\* New Parts

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Teile ohne Parts No. werden nicht geliefert.

Ref. No.	A d d e w	Parts No.	Description	Desti- nation
CN1		E40-9623-05	FLAT CABLE CONNECTOR	
CN11		E40-9637-05	FLAT CABLE CONNECTOR	
CN12		E40-9700-05	FLAT CABLE CONNECTOR	
CN13		E40-9623-05	FLAT CABLE CONNECTOR	
CN14		E40-9404-05	FLAT CABLE CONNECTOR	
CN15		E40-9256-05	FLAT CABLE CONNECTOR	
CN20		E40-9484-05	PIN ASSY	
CN21		E40-9256-05	FLAT CABLE CONNECTOR	
CN70		E40-9699-05	FLAT CABLE CONNECTOR	
F20		F53-0140-05	FUSE (1A)	
L10		L40-1001-78	SMALL FIXED INDUCTOR (10UH)	
L21		L33-1126-05	CHOKE COIL (82UH)	
L30 - 33		L40-1001-78	SMALL FIXED INDUCTOR (10UH)	
L60		L40-1001-78	SMALL FIXED INDUCTOR (10UH)	
L70		L40-1505-34	SMALL FIXED INDUCTOR (15UH)	
L91		L40-2795-34	SMALL FIXED INDUCTOR (2.7UH)	
L250,251		L40-2795-34	SMALL FIXED INDUCTOR (2.7UH)	
T20		L19-0580-05	DC/DC CONVERTER	
R6 - 8		RK73EB2B471J	CHIP R 470 J 1/8W	
R11,12		RK73GB1J333J	CHIP R 33K J 1/16W	
R13 - 16		RK73GB1J100J	CHIP R 10 J 1/16W	
R18		RK73EB2B751J	CHIP R 750 J 1/8W	
R20		RK73FB2A103J	CHIP R 10K J 1/10W	
R21		RK73FB2A102J	CHIP R 1.0K J 1/10W	
R22,23		RK73EB2B132J	CHIP R 1.3K J 1/8W	
R26		RK73GB1J101J	CHIP R 100 J 1/16W	
R27		RK73GB1J103J	CHIP R 10K J 1/16W	
R28		RK73GB1J154J	CHIP R 150K J 1/16W	
R29		RK73GB1J102J	CHIP R 1.0K J 1/16W	
R30		RK73GB1J471J	CHIP R 470 J 1/16W	
R31		RK73GB1J303J	CHIP R 30K J 1/16W	
R32		RK73GB1J103J	CHIP R 10K J 1/16W	
R33		RK73GB1J472J	CHIP R 4.7K J 1/16W	
R34		RK73GB1J271J	CHIP R 270 J 1/16W	
R35		RK73GB1J222J	CHIP R 2.2K J 1/16W	
R36		RK73GB1J103J	CHIP R 10K J 1/16W	
R37		RK73GB1J333J	CHIP R 33K J 1/16W	
R38		RK73GB1J433J	CHIP R 43K J 1/16W	
R39		RK73GB1J222J	CHIP R 2.2K J 1/16W	
R40		RK73GB1J203J	CHIP R 20K J 1/16W	
R41		RK73GB1J303J	CHIP R 30K J 1/16W	
R42		RK73GB1J203J	CHIP R 20K J 1/16W	
R43		RK73GB1J303J	CHIP R 30K J 1/16W	
R44,45		RK73GB1J123J	CHIP R 12K J 1/16W	
R46		RK73GB1J243J	CHIP R 24K J 1/16W	
R47		RK73GB1J153J	CHIP R 15K J 1/16W	
R48		RK73GB1J273J	CHIP R 27K J 1/16W	
R49		RK73GB1J183J	CHIP R 18K J 1/16W	
R50		RK73GB1J223J	CHIP R 22K J 1/16W	
R51		RK73GB1J183J	CHIP R 18K J 1/16W	
R52		RK73GB1J223J	CHIP R 22K J 1/16W	
R53,54		RK73GB1J822J	CHIP R 8.2K J 1/16W	
R55 - 57		RK73GB1J101J	CHIP R 100 J 1/16W	

▲ indicates safety critical components.

# KVC-1000

# PARTS LIST

\* New Parts

Parts without Part No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

(D40-1133-05)

Ref. No.	A d d e w	Parts No.	Description	Desti- nation
Q20-22		2SC3303(Y-LB)	TRANSISTOR	
Q23		DTA143XK	DIGITAL TRANSISTOR	
Q24		DTC124EK	DIGITAL TRANSISTOR	
Q60,61		2SC2412K	TRANSISTOR	
Q73,74		DTC124EUA	DIGITAL TRANSISTOR	
Q91		2SC2411K	TRANSISTOR	
<b>MECHANIS ASSY (D40-1133-05)</b>				
1	1B	*A10-4697-08	CHASSIS ASSY	
2	1B	D14-0718-08	ROLLER	
5	1B	D13-1500-08	RACK (GEAR)	
6	1B	J30-1067-08	SPACER	
7	1B	J30-1068-08	SPACER (BLACK)	
8	2D	D10-4478-08	SLIDER ASSY	
9	2D	D21-2335-08	SHAFT	
10	2D	D13-2003-08	GEAR	
11	2D	D23-0947-08	RETAINER	
12	2D	D13-2005-08	GEAR	
13	2D	D13-2004-08	GEAR	
14	2D	D13-2084-08	GEAR	
15	2D	D13-2013-08	GEAR	
16	2D	D13-2012-08	GEAR	
17	2D	D13-2011-08	GEAR	
18	2D	D13-2010-08	GEAR	
22	2D	J90-0952-08	GUIDE	
23	1D	G01-3007-08	COMPRESSION COIL SPRING	
26	1B	D10-4389-08	SLIDER	
27	1B	D10-4390-08	SLIDER	
29	2D	J21-9530-08	MOUNTING HARDWARE	
30	2D	D13-2085-08	GEAR ASSY	
32	2D	G02-1333-08	FLAT SPRING	
33	2D	J21-9531-08	MOUNTING HARDWARE	
34	2D	D13-2086-08	GEAR ASSY	
35	2D	J26-4039-08	PCB ASSY (with VARIABLE RESISTOR)	
36	2D	D13-2059-08	GEAR ASSY	
38	1B	J90-0951-08	GUIDE	
39	2B	G01-3008-08	TENSION COIL SPRING	
40	2D	R31-0228-08	VARIABLE RESISTOR	
44	1D	F19-1346-08	BLIND PLATE	
45	2D	E39-0340-08	WIRE HARNESS (2-PIN)	
46	2D	E39-0341-08	WIRE HARNESS (3-PIN)	
47	2D	E39-0342-08	WIRE HARNESS (3-PIN)	
51	2D	N29-0509-08	RETAINING RING	
52	1B	N19-2131-08	FLAT WASHER	
53	2D	N19-1135-08	FLAT WASHER	
54	2D	N29-0517-08	RETAINING RING	
55	1B	N09-4290-08	MACHINE SCREW	
56	1D	N09-4330-08	STEPPED SCREW	
58	1B	N09-4374-08	MACHINE SCREW (2X2.2)	
59	2D	N09-4375-08	MACHINE SCREW (2X4)	
60	2D	N38-2030-45	PAN HEAD MACHINE SCREW (2X3)	
61	2D	N09-4376-08	MACHINE SCREW (2X3)	
62	1D	N09-4164-08	TAPTRITE SCREW (2X3)	
69	1B	F09-1633-08	SHEET	

Ref. No.	A d d e w	Parts No.	Description	Desti- nation
CN1		E40-9775-08	PIN ASSY (16-PIN)	
CN2		E40-9777-08	PIN ASSY (25-PIN)	
CN3		E40-9776-08	PIN ASSY (20-PIN)	
CN4		E40-9778-08	PIN ASSY (30-PIN)	
CN5,6		E40-9542-08	PIN ASSY (2-PIN)	
CN7,8		E40-9543-08	PIN ASSY (3-PIN)	
CN9		E40-9542-08	PIN ASSY (2-PIN)	
M1,2	2D	T42-1024-08	MOTOR ASSY	

▲ indicates safety critical components.

E : Europe K : North America M : Other Areas  
W : Without Europe

E : Europe K : North America M : Other Areas  
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# KVC-1000

## SPECIFICATIONS

Monitor					
Screen Size (Diagonal)	6.5-inch WIDE				
Screen Size (Width x Height)	142.6mm x 80.7mm				
Display System	Transparent TN LCD Panel				
Drive System	TFT Active Matrix System				
Number of Pixels	336,960 (480H x 234V x RGB)				
Effective Pixels	99.99%				
Pixel Arrangement	RGB Stripe				
Back lighting	Cold Cathode Tube				
Speaker Audio Output	1W (40mm x 20mm)				
TV Tuner and Terminals					
Color System (Television)	PAL/SECAM				
Color System (Video)	NTSC/PAL				
Television System	(PAL) B/G	(PAL) I	(SECAM) L	(SECAM) D/K	(SECAM) B/G
Channel Converge (VHF)	2ch - 12ch Ach - H2ch	Ach - Jch	2ch - 10ch	1ch - 12ch	2ch - 12ch
Channel Converge (UHF)	21ch - 69ch	21ch - 69ch	21ch - 69ch	21ch - 69ch	21ch - 69ch
Channel Selection System	PLL Frequency Synthesizer System				
Demodulation System	Split-Carrier System				
Antenna Input	4ch Diversity System (75Ω / Mini Plug 3.5φ)				
Front Aux Input (Mini Jack x 1)					
Video Input Level	1Vp-p/75Ω				
Audio Input Level	1V/22KΩ				
Video Input/Output (RCA Pin x 1)					
Video Input Level	1Vp-p/75Ω				
Audio Input Level	1V/22KΩ				
Video Output Level	1Vp-p/75Ω				
Audio Output Level	500mV/1KΩ				
RGB Input (13-Pin)	0.7Vp-p/75Ω				
General					
Operating Voltage	14.4V (11V ~ 16V)				
Current Consumption	2.0A (1.4A during normal operations)				
Operating Temperature Range	-10°C ~ +60°C				
Storage Temperature Range	-20°C ~ +85°C				
Main Unit Size (Width x Height x Depth)	180mm x 50mm x 182mm				
Installation Size (Width x Height x Depth)	178mm x 50mm x 165mm				
Main Unit Weight	1.8Kg				

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

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